

PROJECT: California High Speed Train EIR/EIS**Terminal Station - San Francisco 4th & King Station (Segment 2 - Caltrain)****CONCEPTUAL CONSTRUCTION COST ESTIMATE**

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Inspection Platform Side-By-Side w/Passenger Platform					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	12.00	\$92,400	
	Site Demolition	HECT	\$800,000.00	12.00	\$9,600,000	
						\$9,692,400
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	-	\$0	
						\$0
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	Cut & Cover Structure - Incl. Earthwork, Support System & Structure	HECT	\$26,206,000.00	12.00	\$314,472,000	
						\$314,472,000
6	Track work					
	Direct Fixation	M	\$800.23	8,000	\$6,401,840	
	Turnouts, No. 32.7 W. Conc. Ties	EA	\$365,000.00	4	\$1,460,000	
	Crossover, No. 32.7 w. Conc. Ties	EA	\$750,000.00	2	\$1,500,000	
	Bumping Posts	EA	\$50,000.00	6	\$300,000	
	Heavy Duty Rubber Grade Crossing					\$9,661,840
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					
						\$0
8	Traction Power					
	(Included in Overall Estimate)					\$0
9	Train Control					
	(Included in Overall Estimate)					\$0
10	Station Platform and Inspection Facility					
	Platforms:					
	Foundation- Pier Caissons	SM	170	10,800	\$1,836,000	
	Pier Caps	SM	\$175.00	10,800	\$1,890,000	
	Platform Slab	SM	\$120.00	10,800	\$1,296,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	2,400	\$600,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	10,800	\$3,672,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	10,800	\$1,728,000	
	Station Lighting	SM	\$130.00	10,800	\$1,404,000	
	Signage	platform	\$5,000.00	3	\$15,000	
	Platform Furnishing	platform	\$45,000.00	3	\$135,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	12	\$240,000	
	Inspection Platforms:					
	Under Car/Component Inspection Area	SM	\$73.00	10,800	\$788,400	
	Lighting	SM	\$90.00	10,800	\$972,000	
	Inspection Pit	M	\$2,300.00	2,400	\$5,520,000	
	Inspection Pit Rail Support	M	\$945.00	2,400	\$2,268,000	
	Vehicle Floor Level Inspection Platform- Str. Steel	SM	\$405.00	10,800	\$4,374,000	
	Vehicle Floor Level Inspection Platform- Grating & Railing	SM	\$270.00	10,800	\$2,916,000	
	Lighting	SM	\$90.00	10,800	\$972,000	
	Vehicle Roof Level Inspection Platform- Str. Steel	SM	\$485.00	10,800	\$5,238,000	
	Vehicle Roof Level Inspection Platform- Grating & Railing	SM	\$270.00	10,800	\$2,916,000	
	Lighting Pole Mounted	SM	\$110.00	10,800	\$1,188,000	
	Maint. Equipments & Tools	Platform	\$100,000.00	4	\$400,000	
						\$40,368,400
11	Station Building & Access to Platforms					
	Passenger Terminal (300'x200' Foot Print)	SM	\$540.00	11,000	\$5,940,000	
	Ticketing (Enclosed)		\$3,200.00	100	\$320,000	
						\$6,260,000
	Sub-Total					\$380,450,000
	Mobilization & Indirect Field Cost		15%			\$57,067,500
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$437,517,500
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

Exclusions:

Real Estate
Central Operating Control System
Escalation to Mid-point of Construction
Environmental Mitigation
Engineering, CM, Inspection & owner's cost of administration
Contingencies

PROJECT: California High Speed Train EIR/EIS**Terminal Station - West Oakland Station (Segment 4 - Underground)****CONCEPTUAL CONSTRUCTION COST ESTIMATE**

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Inspection Platform Behind Passenger Platform					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	9.00	\$69,300	
	Site Demolition	HECT	\$800,000.00	9.00	\$7,200,000	
						\$7,269,300
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	-	\$0	
						\$0
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	Cut & Cover Structure - Incl. Earthwork, Support System & Structure	HECT	\$26,206,000.00	9.00	\$235,854,000	
						\$235,854,000
6	Track work					
	Direct Fixation	M	\$800.23	7,000	\$5,601,610	
	Turnouts, No. 32.7 W. Conc. Ties	EA	\$365,000.00	2	\$730,000	
	Crossover, No. 32.7 w. Conc. Ties	EA	\$750,000.00	2	\$1,500,000	
	Bumping Posts	EA	\$50,000.00	4	\$200,000	
	Heavy Duty Rubber Grade Crossing					
						\$8,031,610
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					
						\$0
8	Traction Power					
	(Included in Overall Estimate)					\$0
9	Train Control					
	(Included in Overall Estimate)					\$0
10	Station Platform and Inspection Facility					
	Platforms:					
	Foundation- Pier Caissons	SM	170	7,200	\$1,224,000	
	Pier Caps	SM	\$175.00	7,200	\$1,260,000	
	Platform Slab	SM	\$120.00	7,200	\$864,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	1,600	\$400,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	7,200	\$2,448,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	7,200	\$1,152,000	
	Station Lighting	SM	\$130.00	7,200	\$936,000	
	Signage	platform	\$5,000.00	2	\$10,000	
	Platform Furnishing	platform	\$45,000.00	2	\$90,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	8	\$160,000	
	Inspection Platforms:					
	Under Car/Component Inspection Area	SM	\$73.00	11,400	\$832,200	
	Lighting	SM	\$90.00	11,400	\$1,026,000	
	Inspection Pit	M	\$2,300.00	1,600	\$3,680,000	
	Inspection Pit Rail Support	M	\$945.00	1,600	\$1,512,000	
	Vehicle Floor Level Inspection Platform- Str. Steel	SM	\$405.00	11,400	\$4,617,000	
	Vehicle Floor Level Inspection Platform- Grating & Railing	SM	\$270.00	11,400	\$3,078,000	
	Lighting	SM	\$90.00	11,400	\$1,026,000	
	Vehicle Roof Level Inspection Platform- Str. Steel	SM	\$485.00	11,400	\$5,529,000	
	Vehicle Roof Level Inspection Platform- Grating & Railing	SM	\$270.00	11,400	\$3,078,000	
	Lighting Pole Mounted	SM	\$110.00	11,400	\$1,254,000	
	Maint. Equipments & Tools	Platform	\$100,000.00	5	\$500,000	
						\$34,676,200
11	Station Building & Access to Platforms					
	Passenger Terminal (300'x200' Foot Print)	SM	\$540.00	11,000	\$5,940,000	
	Ticketing (Enclosed)		\$3,200.00	100	\$320,000	
						\$6,260,000
	Sub-Total					\$292,090,000
	Mobilization & Indirect Field Cost		15%			\$43,813,500
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$335,903,500
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

Exclusions:

Real Estate

Central Operating Control System

Escalation to Mid-point of Construction

Environmental Mitigation

Engineering, CM, Inspection & owner's cost of administration

Contingencies

PROJECT: California High Speed Train EIR/EIS**Terminal Station - Oakland City Center Station (Segment 5 - Underground)****CONCEPTUAL CONSTRUCTION COST ESTIMATE**

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Inspection Platform Behind Passenger Platform					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	9.00	\$69,300	
	Site Demolition	HECT	\$800,000.00	9.00	\$7,200,000	
						\$7,269,300
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	-	\$0	
						\$0
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	Cut & Cover Structure - Incl. Earthwork, Support System & Structure	HECT	\$26,206,000.00	9.00	\$235,854,000	
						\$235,854,000
6	Track work					
	Direct Fixation	M	\$800.23	7,000	\$5,601,610	
	Turnouts, No. 32.7 W. Conc. Ties	EA	\$365,000.00	2	\$730,000	
	Crossover, No. 32.7 w. Conc. Ties	EA	\$750,000.00	2	\$1,500,000	
	Bumping Posts	EA	\$50,000.00	4	\$200,000	
	Heavy Duty Rubber Grade Crossing					
						\$8,031,610
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					
						\$0
8	Traction Power					
	(Included in Overall Estimate)					\$0
9	Train Control					
	(Included in Overall Estimate)					\$0
10	Station Platform and Inspection Facility					
	Platforms:					
	Foundation- Pier Caissons	SM	170	7,200	\$1,224,000	
	Pier Caps	SM	\$175.00	7,200	\$1,260,000	
	Platform Slab	SM	\$120.00	7,200	\$864,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	1,600	\$400,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	7,200	\$2,448,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	7,200	\$1,152,000	
	Station Lighting	SM	\$130.00	7,200	\$936,000	
	Signage	platform	\$5,000.00	2	\$10,000	
	Platform Furnishing	platform	\$45,000.00	2	\$90,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	8	\$160,000	
	Inspection Platforms:					
	Under Car/Component Inspection Area	SM	\$73.00	11,400	\$832,200	
	Lighting	SM	\$90.00	11,400	\$1,026,000	
	Inspection Pit	M	\$2,300.00	1,600	\$3,680,000	
	Inspection Pit Rail Support	M	\$945.00	1,600	\$1,512,000	
	Vehicle Floor Level Inspection Platform- Str. Steel	SM	\$405.00	11,400	\$4,617,000	
	Vehicle Floor Level Inspection Platform- Grating & Railing	SM	\$270.00	11,400	\$3,078,000	
	Lighting	SM	\$90.00	11,400	\$1,026,000	
	Vehicle Roof Level Inspection Platform- Str. Steel	SM	\$485.00	11,400	\$5,529,000	
	Vehicle Roof Level Inspection Platform- Grating & Railing	SM	\$270.00	11,400	\$3,078,000	
	Lighting Pole Mounted	SM	\$110.00	11,400	\$1,254,000	
	Maint. Equipments & Tools	Platform	\$100,000.00	5	\$500,000	
						\$34,676,200
11	Station Building & Access to Platforms					
	Passenger Terminal (300'x200' Foot Print)	SM	\$540.00	11,000	\$5,940,000	
	Ticketing (Enclosed)		\$3,200.00	100	\$320,000	
						\$6,260,000
	Sub-Total					\$292,090,000
	Mobilization & Indirect Field Cost		15%			\$43,813,500
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$335,903,500
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

Exclusions:

Real Estate

Central Operating Control System

Escalation to Mid-point of Construction

Environmental Mitigation

Engineering, CM, Inspection & owner's cost of administration

Contingencies

PROJECT: California High Speed Train EIR/EIS**Terminal Station - Sacramento Downtown Depot Station****CONCEPTUAL CONSTRUCTION COST ESTIMATE**

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Inspection Platform Side-By-Side w/Passenger Platform					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	12.00	\$92,400	
	Site Demolition	HECT	\$800,000.00	12.00	\$9,600,000	
						\$9,692,400
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	-	\$0	
						\$0
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	Aerial Structure	HECT	\$10,750,000.00	12.00	\$129,000,000	
						\$129,000,000
6	Track work					
	Direct Fixation	M	\$800.23	8,000	\$6,401,840	
	Turnouts, No. 32.7 W. Conc. Ties	EA	\$365,000.00	4	\$1,460,000	
	Crossover, No. 32.7 w. Conc. Ties	EA	\$750,000.00	2	\$1,500,000	
	Bumping Posts	EA	\$50,000.00	6	\$300,000	
	Heavy Duty Rubber Grade Crossing					\$9,661,840
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					
						\$0
8	Traction Power					
	(Included in Overall Estimate)					\$0
9	Train Control					
	(Included in Overall Estimate)					\$0
10	Station Platform and Inspection Facility					
	Platforms:					
	Foundation- Pier Caissons	SM	170	10,800	\$1,836,000	
	Pier Caps	SM	\$175.00	10,800	\$1,890,000	
	Platform Slab	SM	\$120.00	10,800	\$1,296,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	2,400	\$600,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	10,800	\$3,672,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	10,800	\$1,728,000	
	Station Lighting	SM	\$130.00	10,800	\$1,404,000	
	Signage	platform	\$5,000.00	3	\$15,000	
	Platform Furnishing	platform	\$45,000.00	3	\$135,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	12	\$240,000	
	Inspection Platforms:					
	Under Car/Component Inspection Area	SM	\$73.00	10,800	\$788,400	
	Lighting	SM	\$90.00	10,800	\$972,000	
	Inspection Pit	M	\$2,300.00	2,400	\$5,520,000	
	Inspection Pit Rail Support	M	\$945.00	2,400	\$2,268,000	
	Vehicle Floor Level Inspection Platform- Str. Steel	SM	\$405.00	10,800	\$4,374,000	
	Vehicle Floor Level Inspection Platform- Grating & Railing	SM	\$270.00	10,800	\$2,916,000	
	Lighting	SM	\$90.00	10,800	\$972,000	
	Vehicle Roof Level Inspection Platform- Str. Steel	SM	\$485.00	10,800	\$5,238,000	
	Vehicle Roof Level Inspection Platform- Grating & Railing	SM	\$270.00	10,800	\$2,916,000	
	Lighting Pole Mounted	SM	\$110.00	10,800	\$1,188,000	
	Maint. Equipments & Tools	Platform	\$100,000.00	4	\$400,000	
						\$40,368,400
11	Station Building & Access to Platforms					
	Passenger Terminal (300'x200' Foot Print)	SM	\$540.00	11,000	\$5,940,000	
	Ticketing (Enclosed)		\$3,200.00	100	\$320,000	
						\$6,260,000
	Sub-Total					\$194,980,000
	Mobilization & Indirect Field Cost		15%			\$29,247,000
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$224,227,000
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

Exclusions:

Real Estate
Central Operating Control System
Escalation to Mid-point of Construction
Environmental Mitigation
Engineering, CM, Inspection & owner's cost of administration
Contingencies

PROJECT: California High Speed Train EIR/EIS**Terminal Station - Sacramento Power Inn Road Station****CONCEPTUAL CONSTRUCTION COST ESTIMATE**

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Inspection Platform Side-By-Side w/Passenger Platform					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	12.00	\$92,400	
	Site Demolition	HECT	\$800,000.00	12.00	\$9,600,000	
						\$9,692,400
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	-	\$0	
						\$0
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	Aerial Structure	HECT	\$10,750,000.00	12.00	\$129,000,000	
						\$129,000,000
6	Track work					
	Direct Fixation	M	\$800.23	8,000	\$6,401,840	
	Turnouts, No. 32.7 W. Conc. Ties	EA	\$365,000.00	4	\$1,460,000	
	Crossover, No. 32.7 w. Conc. Ties	EA	\$750,000.00	2	\$1,500,000	
	Bumping Posts	EA	\$50,000.00	6	\$300,000	
	Heavy Duty Rubber Grade Crossing					\$9,661,840
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					
						\$0
8	Traction Power					
	(Included in Overall Estimate)					\$0
9	Train Control					
	(Included in Overall Estimate)					\$0
10	Station Platform and Inspection Facility					
	Platforms:					
	Foundation- Pier Caissons	SM	170	10,800	\$1,836,000	
	Pier Caps	SM	\$175.00	10,800	\$1,890,000	
	Platform Slab	SM	\$120.00	10,800	\$1,296,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	2,400	\$600,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	10,800	\$3,672,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	10,800	\$1,728,000	
	Station Lighting	SM	\$130.00	10,800	\$1,404,000	
	Signage	platform	\$5,000.00	3	\$15,000	
	Platform Furnishing	platform	\$45,000.00	3	\$135,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	12	\$240,000	
	Inspection Platforms:					
	Under Car/Component Inspection Area	SM	\$73.00	10,800	\$788,400	
	Lighting	SM	\$90.00	10,800	\$972,000	
	Inspection Pit	M	\$2,300.00	2,400	\$5,520,000	
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	Vehicle Roof Level Inspection Platform- Grating & Railing	SM	\$270.00	10,800	\$2,916,000	
	Lighting Pole Mounted	SM	\$110.00	10,800	\$1,188,000	
	Maint. Equipments & Tools	Platform	\$100,000.00	4	\$400,000	
						\$40,368,400
11	Station Building & Access to Platforms					
	Passenger Terminal (300'x200' Foot Print)	SM	\$540.00	11,000	\$5,940,000	
	Ticketing (Enclosed)		\$3,200.00	100	\$320,000	
						\$6,260,000
	Sub-Total					\$194,980,000
	Mobilization & Indirect Field Cost		15%			\$29,247,000
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$224,227,000
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

Exclusions:

Real Estate
Central Operating Control System
Escalation to Mid-point of Construction
Environmental Mitigation
Engineering, CM, Inspection & owner's cost of administration
Contingencies

PROJECT: California High Speed Train EIR/EIS

Terminal Station - San Diego Qualcomm Station (Aerial, not near existing tracks)

CONCEPTUAL CONSTRUCTION COST ESTIMATE

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Inspection Platform Side-By-Side w/Passenger Platform					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	2.00	\$15,400	
	Site Demolition	HECT	\$800,000.00	-	\$0	
						\$15,400
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	20,000	\$150,000	
						\$150,000
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	Aerial Structure	HECT	\$10,750,000.00	6.00	\$64,500,000	
						\$64,500,000
6	Track work					
	Direct Fixation	M	\$800.23	3,520	\$2,816,810	
	Turnouts, No. 32.7 W. Conc. Ties	EA	\$365,000.00	2	\$730,000	
	Crossover, No. 32.7 w. Conc. Ties	EA	\$750,000.00	2	\$1,500,000	
	Bumping Posts	EA	\$50,000.00	4	\$200,000	
	Heavy Duty Rubber Grade Crossing					
						\$5,246,810
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					
						\$0
8	Traction Power					
	(Included in Overall Estimate)					
						\$0
9	Train Control					
	(Included in Overall Estimate)					
						\$0
10	Station Platform and Inspection Facility					
	Platforms:					
	Foundation- Pier Caissons	SM	170	7,200	\$1,224,000	
	Pier Caps	SM	\$175.00	7,200	\$1,260,000	
	Platform Slab	SM	\$120.00	7,200	\$864,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	1,600	\$400,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	7,200	\$2,448,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	7,200	\$1,152,000	
	Station Lighting	SM	\$130.00	7,200	\$936,000	
	Signage	platform	\$5,000.00	2	\$10,000	
	Platform Furnishing	platform	\$45,000.00	2	\$90,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	8	\$160,000	
	Inspection Platforms:					
	Under Car/Component Inspection Area	SM	\$73.00	7,200	\$525,600	
	Lighting	SM	\$90.00	7,200	\$648,000	
	Inspection Pit	M	\$2,300.00	1,600	\$3,680,000	
	Inspection Pit Rail Support	M	\$945.00	1,600	\$1,512,000	
	Vehicle Floor Level Inspection Platform- Str. Steel	SM	\$405.00	7,200	\$2,916,000	
	Vehicle Floor Level Inspection Platform- Grating & Railing	SM	\$270.00	7,200	\$1,944,000	
	Lighting	SM	\$90.00	7,200	\$648,000	
	Vehicle Roof Level Inspection Platform- Str. Steel	SM	\$485.00	7,200	\$3,492,000	
	Vehicle Roof Level Inspection Platform- Grating & Railing	SM	\$270.00	7,200	\$1,944,000	
	Lighting Pole Mounted	SM	\$110.00	7,200	\$792,000	
	Maint. Equipments & Tools	Platform	\$100,000.00	3	\$300,000	
						\$26,945,600
11	Station Building & Access to Platforms					
	Passenger Terminal (200'x150' Foot Print)	SM	\$540.00	5,500	\$2,970,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$3,290,000
	Sub-Total					\$100,150,000
	Mobilization & Indirect Field Cost		15%			\$15,022,500
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$115,172,500
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

Exclusions:

Real Estate
Central Operating Control System
Escalation to Mid-point of Construction
Environmental Mitigation
Environmental Mitigation
Engineering, CM, Inspection & owner's cost of administration
Contingencies

PROJECT: California High Speed Train EIR/EIS

Terminal Station - San Diego Airport Station

CONCEPTUAL CONSTRUCTION COST ESTIMATE

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Inspection Platform Side-By-Side w/Passenger Platform					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	2.00	\$15,400	
	Site Demolition	HECT	\$800,000.00	-	\$0	
						\$15,400
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	20,000	\$150,000	
						\$150,000
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	Aerial Structure	HECT	\$10,750,000.00	6.00	\$64,500,000	
						\$64,500,000
6	Track work					
	Direct Fixation	M	\$800.23	3,520	\$2,816,810	
	Turnouts, No. 32.7 W. Conc. Ties	EA	\$365,000.00	2	\$730,000	
	Crossover, No. 32.7 w. Conc. Ties	EA	\$750,000.00	2	\$1,500,000	
	Bumping Posts	EA	\$50,000.00	4	\$200,000	
	Heavy Duty Rubber Grade Crossing					
						\$5,246,810
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					
						\$0
8	Traction Power					
	(Included in Overall Estimate)					
						\$0
9	Train Control					
	(Included in Overall Estimate)					
						\$0
10	Station Platform and Inspection Facility					
	Platforms:					
	Foundation- Pier Caissons	SM	170	7,200	\$1,224,000	
	Pier Caps	SM	\$175.00	7,200	\$1,260,000	
	Platform Slab	SM	\$120.00	7,200	\$864,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	1,600	\$400,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	7,200	\$2,448,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	7,200	\$1,152,000	
	Station Lighting	SM	\$130.00	7,200	\$936,000	
	Signage	platform	\$5,000.00	2	\$10,000	
	Platform Furnishing	platform	\$45,000.00	2	\$90,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	8	\$160,000	
	Inspection Platforms:					
	Under Car/Component Inspection Area	SM	\$73.00	7,200	\$525,600	
	Lighting	SM	\$90.00	7,200	\$648,000	
	Inspection Pit	M	\$2,300.00	1,600	\$3,680,000	
	Inspection Pit Rail Support	M	\$945.00	1,600	\$1,512,000	
	Vehicle Floor Level Inspection Platform- Str. Steel	SM	\$405.00	7,200	\$2,916,000	
	Vehicle Floor Level Inspection Platform- Grating & Railing	SM	\$270.00	7,200	\$1,944,000	
	Lighting	SM	\$90.00	7,200	\$648,000	
	Vehicle Roof Level Inspection Platform- Str. Steel	SM	\$485.00	7,200	\$3,492,000	
	Vehicle Roof Level Inspection Platform- Grating & Railing	SM	\$270.00	7,200	\$1,944,000	
	Lighting Pole Mounted	SM	\$110.00	7,200	\$792,000	
	Maint. Equipments & Tools	Platform	\$100,000.00	3	\$300,000	
						\$26,945,600
11	Station Building & Access to Platforms					
	Passenger Terminal (200'x150' Foot Print)	SM	\$540.00	5,500	\$2,970,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$3,290,000
	Sub-Total					\$100,150,000
	Mobilization & Indirect Field Cost		15%			\$15,022,500
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$115,172,500
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

Exclusions:

Real Estate
 Central Operating Control System
 Escalation to Mid-point of Construction
 Environmental Mitigation
 Environmental Mitigation
 Engineering, CM, Inspection & owner's cost of administration
 Contingencies

PROJECT: California High Speed Train EIR/EIS

Terminal Station - San Diego Downtown Station (Aerial, near existing tracks)

CONCEPTUAL CONSTRUCTION COST ESTIMATE

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Inspection Platform Side-By-Side w/Passenger Platform					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	-	\$0	
	Site Demolition	HECT	\$800,000.00	-	\$0	
						\$0
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	-	\$0	
						\$0
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	Aerial Structure	HECT	\$10,750,000.00	6.00	\$64,500,000	
						\$64,500,000
6	Track work					
	Direct Fixation	M	\$800.23	3,520	\$2,816,810	
	Turnouts, No. 32.7 W. Conc. Ties	EA	\$365,000.00	2	\$730,000	
	Crossover, No. 32.7 w. Conc. Ties	EA	\$750,000.00	2	\$1,500,000	
	Bumping Posts	EA	\$50,000.00	4	\$200,000	
	Heavy Duty Rubber Grade Crossing					
						\$5,246,810
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					
						\$0
8	Traction Power					
	(Included in Overall Estimate)					
						\$0
9	Train Control					
	(Included in Overall Estimate)					
						\$0
10	Station Platform and Inspection Facility					
	Platforms:					
	Foundation- Pier Caissons	SM	170	7,200	\$1,224,000	
	Pier Caps	SM	\$175.00	7,200	\$1,260,000	
	Platform Slab	SM	\$120.00	7,200	\$864,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	1,600	\$400,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	7,200	\$2,448,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	7,200	\$1,152,000	
	Station Lighting	SM	\$130.00	7,200	\$936,000	
	Signage	platform	\$5,000.00	2	\$10,000	
	Platform Furnishing	platform	\$45,000.00	2	\$90,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	8	\$160,000	
	Inspection Platforms:					
	Under Car/Component Inspection Area	SM	\$73.00	7,200	\$525,600	
	Lighting	SM	\$90.00	7,200	\$648,000	
	Inspection Pit	M	\$2,300.00	1,600	\$3,680,000	
	Inspection Pit Rail Support	M	\$945.00	1,600	\$1,512,000	
	Vehicle Floor Level Inspection Platform- Str. Steel	SM	\$405.00	7,200	\$2,916,000	
	Vehicle Floor Level Inspection Platform- Grating & Railing	SM	\$270.00	7,200	\$1,944,000	
	Lighting	SM	\$90.00	7,200	\$648,000	
	Vehicle Roof Level Inspection Platform- Str. Steel	SM	\$485.00	7,200	\$3,492,000	
	Vehicle Roof Level Inspection Platform- Grating & Railing	SM	\$270.00	7,200	\$1,944,000	
	Lighting Pole Mounted	SM	\$110.00	7,200	\$792,000	
	Maint. Equipments & Tools	Platform	\$100,000.00	3	\$300,000	
						\$26,945,600
11	Station Building & Access to Platforms					
	Passenger Terminal (200'x150' Foot Print)	SM	\$540.00	5,500	\$2,970,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$3,290,000
	Sub-Total					\$99,980,000
	Mobilization & Indirect Field Cost		15%			\$14,997,000
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$114,977,000
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

Exclusions:

Real Estate
 Central Operating Control System
 Escalation to Mid-point of Construction
 Environmental Mitigation
 Environmental Mitigation
 Engineering, CM, Inspection & owner's cost of administration
 Contingencies

PROJECT: California High Speed Train EIR/EIS**Terminal Station - Los Angeles Airport Station (Underground)****CONCEPTUAL CONSTRUCTION COST ESTIMATE**

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Inspection Platform Behind Passenger Platform					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	9.00	\$69,300	
	Site Demolition	HECT	\$800,000.00	9.00	\$7,200,000	
						\$7,269,300
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	-	\$0	
						\$0
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	Cut & Cover Structure - Incl. Earthwork, Support System & Structure	HECT	\$26,206,000.00	9.00	\$235,854,000	
						\$235,854,000
6	Track work					
	Direct Fixation	M	\$800.23	7,000	\$5,601,610	
	Turnouts, No. 32.7 W. Conc. Ties	EA	\$365,000.00	2	\$730,000	
	Crossover, No. 32.7 w. Conc. Ties	EA	\$750,000.00	2	\$1,500,000	
	Bumping Posts	EA	\$50,000.00	4	\$200,000	
	Heavy Duty Rubber Grade Crossing					
						\$8,031,610
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					
						\$0
8	Traction Power					
	(Included in Overall Estimate)					\$0
9	Train Control					
	(Included in Overall Estimate)					\$0
10	Station Platform and Inspection Facility					
	Platforms:					
	Foundation- Pier Caissons	SM	170	7,200	\$1,224,000	
	Pier Caps	SM	\$175.00	7,200	\$1,260,000	
	Platform Slab	SM	\$120.00	7,200	\$864,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	1,600	\$400,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	7,200	\$2,448,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	7,200	\$1,152,000	
	Station Lighting	SM	\$130.00	7,200	\$936,000	
	Signage	platform	\$5,000.00	2	\$10,000	
	Platform Furnishing	platform	\$45,000.00	2	\$90,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	8	\$160,000	
	Inspection Platforms:					
	Under Car/Component Inspection Area	SM	\$73.00	11,400	\$832,200	
	Lighting	SM	\$90.00	11,400	\$1,026,000	
	Inspection Pit	M	\$2,300.00	1,600	\$3,680,000	
	Inspection Pit Rail Support	M	\$945.00	1,600	\$1,512,000	
	Vehicle Floor Level Inspection Platform- Str. Steel	SM	\$405.00	11,400	\$4,617,000	
	Vehicle Floor Level Inspection Platform- Grating & Railing	SM	\$270.00	11,400	\$3,078,000	
	Lighting	SM	\$90.00	11,400	\$1,026,000	
	Vehicle Roof Level Inspection Platform- Str. Steel	SM	\$485.00	11,400	\$5,529,000	
	Vehicle Roof Level Inspection Platform- Grating & Railing	SM	\$270.00	11,400	\$3,078,000	
	Lighting Pole Mounted	SM	\$110.00	11,400	\$1,254,000	
	Maint. Equipments & Tools	Platform	\$100,000.00	5	\$500,000	
						\$34,676,200
11	Station Building & Access to Platforms					
	Passenger Terminal (300'x200' Foot Print)	SM	\$540.00	11,000	\$5,940,000	
	Ticketing (Enclosed)		\$3,200.00	100	\$320,000	
						\$6,260,000
	Sub-Total					\$292,090,000
	Mobilization & Indirect Field Cost		15%			\$43,813,500
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$335,903,500
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

Exclusions:

Real Estate

Central Operating Control System

Escalation to Mid-point of Construction

Environmental Mitigation

Engineering, CM, Inspection & owner's cost of administration

Contingencies

PROJECT: California High Speed Train EIR/EIS**Terminal Station - Anaheim/Irvine Station****CONCEPTUAL CONSTRUCTION COST ESTIMATE**

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Inspection Platform Behind Passenger Platform					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	9.00	\$69,300	
	Site Demolition	HECT	\$800,000.00	9.00	\$7,200,000	
						\$7,269,300
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	-	\$0	
						\$0
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	Cut & Cover Structure - Incl. Earthwork, Support System & Structure	HECT	\$26,206,000.00	9.00	\$235,854,000	
						\$235,854,000
6	Track work					
	Direct Fixation	M	\$800.23	7,000	\$5,601,610	
	Turnouts, No. 32.7 W. Conc. Ties	EA	\$365,000.00	2	\$730,000	
	Crossover, No. 32.7 w. Conc. Ties	EA	\$750,000.00	2	\$1,500,000	
	Bumping Posts	EA	\$50,000.00	4	\$200,000	
	Heavy Duty Rubber Grade Crossing					
						\$8,031,610
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					
						\$0
8	Traction Power					
	(Included in Overall Estimate)					
						\$0
9	Train Control					
	(Included in Overall Estimate)					
						\$0
10	Station Platform and Inspection Facility					
	Platforms:					
	Foundation- Pier Caissons	SM	170	7,200	\$1,224,000	
	Pier Caps	SM	\$175.00	7,200	\$1,260,000	
	Platform Slab	SM	\$120.00	7,200	\$864,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	1,600	\$400,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	7,200	\$2,448,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	7,200	\$1,152,000	
	Station Lighting	SM	\$130.00	7,200	\$936,000	
	Signage	platform	\$5,000.00	2	\$10,000	
	Platform Furnishing	platform	\$45,000.00	2	\$90,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	8	\$160,000	
	Inspection Platforms:					
	Under Car/Component Inspection Area	SM	\$73.00	11,400	\$832,200	
	Lighting	SM	\$90.00	11,400	\$1,026,000	
	Inspection Pit	M	\$2,300.00	1,600	\$3,680,000	
	Inspection Pit Rail Support	M	\$945.00	1,600	\$1,512,000	
	Vehicle Floor Level Inspection Platform- Str. Steel	SM	\$405.00	11,400	\$4,617,000	
	Vehicle Floor Level Inspection Platform- Grating & Railing	SM	\$270.00	11,400	\$3,078,000	
	Lighting	SM	\$90.00	11,400	\$1,026,000	
	Vehicle Roof Level Inspection Platform- Str. Steel	SM	\$485.00	11,400	\$5,529,000	
	Vehicle Roof Level Inspection Platform- Grating & Railing	SM	\$270.00	11,400	\$3,078,000	
	Lighting Pole Mounted	SM	\$110.00	11,400	\$1,254,000	
	Maint. Equipments & Tools	Platform	\$100,000.00	5	\$500,000	
						\$34,676,200
11	Station Building & Access to Platforms					
	Passenger Terminal (300'x200' Foot Print)	SM	\$540.00	11,000	\$5,940,000	
	Ticketing (Enclosed)		\$3,200.00	100	\$320,000	
						\$6,260,000
	Sub-Total					\$292,090,000
	Mobilization & Indirect Field Cost		15%			\$43,813,500
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$335,903,500
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

Exclusions:

Real Estate

Central Operating Control System

Escalation to Mid-point of Construction

Environmental Mitigation

Engineering, CM, Inspection & owner's cost of administration

Contingencies

PARSONS BRINCKERHOFF

PREPARED BY: SM

CHECKED BY:

DATE: 6/16/2003

PROJECT: California High Speed Train EIR/EIS**Intermediate Stations****CONCEPTUAL CONSTRUCTION COST ESTIMATE**

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Union Station (Terminal/Intermediate)					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	2.00	\$15,400	
	Site Demolition	HECT	\$800,000.00	2.00	\$1,600,000	
						\$1,615,400
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	-	\$0	
						\$0
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	Aerial Structure	HECT	\$10,750,000.00	5.00	\$53,750,000	
						\$53,750,000
6	Track work					
	Direct Fixation	M	\$800.23	3,760	\$3,008,865	
	Turnouts, No. 26.5 W. Conc. Ties	EA	\$365,000.00	7	\$2,555,000	
	Crossover, No. 26.5 w. Conc. Ties	EA	\$750,000.00	5	\$3,750,000	
	Bumping Posts	EA	\$50,000.00		\$0	
	Heavy Duty Rubber Grade Crossing					
						\$9,313,865
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					
						\$0
8	Traction Power					
	(Included in Overall Estimate)					
						\$0
9	Train Control					
	(Included in Overall Estimate)					
						\$0
10	Station Platform					
	Platforms:					
	Foundation- Pier Caissons	SM	170	10,800	\$1,836,000	
	Pier Caps	SM	\$175.00	10,800	\$1,890,000	
	Platform Slab	SM	\$120.00	10,800	\$1,296,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	2,400	\$600,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	10,800	\$3,672,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	10,800	\$1,728,000	
	Station Lighting	SM	\$130.00	10,800	\$1,404,000	
	Signage	platform	\$5,000.00	3	\$15,000	
	Platform Furnishing	platform	\$45,000.00	3	\$135,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	12	\$240,000	
						\$12,816,000
11	Station Building & Access to Platforms					
	Passenger Terminal (300'x200' Foot Print)	SM	\$540.00	11,000	\$5,940,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$6,260,000
	Sub-Total					\$83,760,000
	Mobilization & Indirect Field Cost		15%			\$12,564,000
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$96,324,000
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

PARSONS BRINCKERHOFF

PREPARED BY: SM

CHECKED BY:

DATE: 6/16/2003

PROJECT: California High Speed Train EIR/EIS**Intermediate Stations****CONCEPTUAL CONSTRUCTION COST ESTIMATE**

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	San Jose Diridon Station (Segment 9 - Urban Aerial)					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	-	\$0	
	Site Demolition	HECT	\$800,000.00	-	\$0	
						\$0
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	-	\$0	
						\$0
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	Aerial Structure	HECT	\$10,750,000.00	5.00	\$53,750,000	
						\$53,750,000
6	Track work					
	Direct Fixation	M	\$800.23	3,760	\$3,008,865	
	Turnouts, No. 26.5 W. Conc. Ties	EA	\$365,000.00	2	\$730,000	
	Crossover, No. 26.5 w. Conc. Ties	EA	\$750,000.00	6	\$4,500,000	
	Crossover, No. 20 w. Conc. Ties	EA	\$400,000.00	6	\$2,400,000	
	Bumping Posts	EA	\$50,000.00		\$0	
	Heavy Duty Rubber Grade Crossing					
						\$10,638,865
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					
						\$0
8	Traction Power					
	(Included in Overall Estimate)					
						\$0
9	Train Control					
	(Included in Overall Estimate)					
						\$0
10	Station Platform					
	Platforms:					
	Foundation- Pier Caissons	SM	170	10,800	\$1,836,000	
	Pier Caps	SM	\$175.00	10,800	\$1,890,000	
	Platform Slab	SM	\$120.00	10,800	\$1,296,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	2,400	\$600,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	10,800	\$3,672,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	10,800	\$1,728,000	
	Station Lighting	SM	\$130.00	10,800	\$1,404,000	
	Signage	platform	\$5,000.00	3	\$15,000	
	Platform Furnishing	platform	\$45,000.00	3	\$135,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	12	\$240,000	
						\$12,816,000
11	Station Building & Access to Platforms					
	Passenger Terminal (250'x150' Foot Print)	SM	\$540.00	6,900	\$3,726,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$4,046,000
	Sub-Total					\$81,250,000
	Mobilization & Indirect Field Cost		15%			
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$12,187,500
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

PARSONS BRINCKERHOFF

PREPARED BY: SM

CHECKED BY:

DATE: 6/16/2003

PROJECT: California High Speed Train EIR/EIS

Intermediate Stations

CONCEPTUAL CONSTRUCTION COST ESTIMATE

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Oakland Airport/Coliseum Station (Segment 6 - Urban At-grade)					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	4.00	\$30,800	
	Site Demolition	HECT	\$800,000.00	4.00	\$3,200,000	
						\$3,230,800
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	105,000.00	\$787,500	
						\$787,500
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	At-grade					\$0
6	Track work					
	Ballasted Track Incl. Ballast and subballast	M	\$430.00	7,000	\$3,010,000	
	Turnouts, No. 40.5 W. Conc. Ties	EA	\$400,000.00	4	\$1,600,000	
	Crossover, No. 40.5 w. Conc. Ties	EA	\$800,000.00	4	\$3,200,000	
	Bumping Posts	EA	\$50,000.00		\$0	
	Heavy Duty Rubber Grade Crossing					\$7,810,000
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					\$0
8	Traction Power					
	(Included in Overall Estimate)					\$0
9	Train Control					
	(Included in Overall Estimate)					\$0
10	Station Platform					
	Platforms:					
	Foundation- Pier Caissons	SM	170	7,200	\$1,224,000	
	Pier Caps	SM	\$175.00	7,200	\$1,260,000	
	Platform Slab	SM	\$120.00	7,200	\$864,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	800	\$200,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	7,200	\$2,448,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	7,200	\$1,152,000	
	Station Lighting	SM	\$130.00	7,200	\$936,000	
	Signage	platform	\$5,000.00	2	\$10,000	
	Platform Furnishing	platform	\$45,000.00	2	\$90,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	8	\$160,000	
						\$8,344,000
11	Station Building & Access to Platforms					
	Passenger Terminal (200'x150' Foot Print)	SM	\$540.00	5,500	\$2,970,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$3,290,000
	Sub-Total					\$23,460,000
	Mobilization & Indirect Field Cost		15%			\$3,519,000
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$26,979,000
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

PARSONS BRINCKERHOFF

PREPARED BY: SM

CHECKED BY:

DATE: 6/16/2003

PROJECT: California High Speed Train EIR/EIS**Intermediate Stations****CONCEPTUAL CONSTRUCTION COST ESTIMATE**

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Union City Station (Segment 7 & 8 - Suburban)					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	4.00	\$30,800	
	Site Demolition	HECT	\$800,000.00	4.00	\$3,200,000	
						\$3,230,800
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	73,000.00	\$547,500	
						\$547,500
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	at grade					\$0
6	Track work					
	Ballasted Track Incl. Ballast and subballast	M	\$430.00	4,860	\$2,089,800	
	Turnouts, No. 32.7 W. Conc. Ties	EA	\$365,000.00	4	\$1,460,000	
	Crossover, No. 32.7 w. Conc. Ties	EA	\$750,000.00	4	\$3,000,000	
	Bumping Posts	EA	\$50,000.00		\$0	
	Heavy Duty Rubber Grade Crossing					\$6,549,800
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					\$0
8	Traction Power					
	(Included in Overall Estimate)					\$0
9	Train Control					
	(Included in Overall Estimate)					\$0
10	Station Platform					
	Platforms:					
	Foundation- Pier Caissons	SM	170	7,200	\$1,224,000	
	Pier Caps	SM	\$175.00	7,200	\$1,260,000	
	Platform Slab	SM	\$120.00	7,200	\$864,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	800	\$200,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	7,200	\$2,448,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	7,200	\$1,152,000	
	Station Lighting	SM	\$130.00	7,200	\$936,000	
	Signage	platform	\$5,000.00	2	\$10,000	
	Platform Furnishing	platform	\$45,000.00	2	\$90,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	8	\$160,000	
						\$8,344,000
11	Station Building & Access to Platforms					
	Passenger Terminal (300'x200' Foot Print)	SM	\$540.00	11,000	\$5,940,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$6,260,000
	Sub-Total					\$24,930,000
	Mobilization & Indirect Field Cost		15%			\$3,739,500
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$28,669,500
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

PARSONS BRINCKERHOFF

PREPARED BY: SM

CHECKED BY:

DATE: 6/16/2003

PROJECT: California High Speed Train EIR/EIS**Intermediate Stations****CONCEPTUAL CONSTRUCTION COST ESTIMATE**

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Auto Mall Parkway (Melford) Station (Suburban)					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	4.00	\$30,800	
	Site Demolition	HECT	\$800,000.00	4.00	\$3,200,000	
						\$3,230,800
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	73,000.00	\$547,500	
						\$547,500
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	at grade					\$0
6	Track work					
	Ballasted Track Incl. Ballast and subballast	M	\$430.00	4,860	\$2,089,800	
	Turnouts, No. 32.7 W. Conc. Ties	EA	\$365,000.00	4	\$1,460,000	
	Crossover, No. 32.7 w. Conc. Ties	EA	\$750,000.00	4	\$3,000,000	
	Bumping Posts	EA	\$50,000.00		\$0	
	Heavy Duty Rubber Grade Crossing					\$6,549,800
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					\$0
8	Traction Power					
	(Included in Overall Estimate)					\$0
9	Train Control					
	(Included in Overall Estimate)					\$0
10	Station Platform					
	Platforms:					
	Foundation- Pier Caissons	SM	170	7,200	\$1,224,000	
	Pier Caps	SM	\$175.00	7,200	\$1,260,000	
	Platform Slab	SM	\$120.00	7,200	\$864,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	800	\$200,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	7,200	\$2,448,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	7,200	\$1,152,000	
	Station Lighting	SM	\$130.00	7,200	\$936,000	
	Signage	platform	\$5,000.00	2	\$10,000	
	Platform Furnishing	platform	\$45,000.00	2	\$90,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	8	\$160,000	
						\$8,344,000
11	Station Building & Access to Platforms					
	Passenger Terminal (300'x200' Foot Print)	SM	\$540.00	11,000	\$5,940,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$6,260,000
	Sub-Total					\$24,930,000
	Mobilization & Indirect Field Cost		15%			\$3,739,500
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$28,669,500
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

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DATE: 6/16/2003

PROJECT: California High Speed Train EIR/EIS

Intermediate Stations

CONCEPTUAL CONSTRUCTION COST ESTIMATE

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Gilroy Station (Segment 12 - Undeveloped)					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	-	\$0	
	Site Demolition	HECT	\$800,000.00	-	\$0	
						\$0
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	-	\$0	
						\$0
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	Aerial Structure	HECT	\$10,750,000.00	4.00	\$43,000,000	
						\$43,000,000
6	Track work					
	Direct Fixation	M	\$800.23	3,760	\$3,008,865	
	Turnouts, No. 26.5 W. Conc. Ties	EA	\$365,000.00	4	\$1,460,000	
	Crossover, No. 26.5 w. Conc. Ties	EA	\$750,000.00	4	\$3,000,000	
	Bumping Posts	EA	\$50,000.00		\$0	
	Heavy Duty Rubber Grade Crossing					
						\$7,468,865
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					
						\$0
8	Traction Power					
	(Included in Overall Estimate)					
						\$0
9	Train Control					
	(Included in Overall Estimate)					
						\$0
10	Station Platform					
	Platforms:					
	Foundation- Pier Caissons	SM	170	10,800	\$1,836,000	
	Pier Caps	SM	\$175.00	10,800	\$1,890,000	
	Platform Slab	SM	\$120.00	10,800	\$1,296,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	2,400	\$600,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	10,800	\$3,672,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	10,800	\$1,728,000	
	Station Lighting	SM	\$130.00	10,800	\$1,404,000	
	Signage	platform	\$5,000.00	3	\$15,000	
	Platform Furnishing	platform	\$45,000.00	3	\$135,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	12	\$240,000	
						\$12,816,000
11	Station Building & Access to Platforms					
	Passenger Terminal (185'x120' Foot Print)	SM	\$540.00	4,000	\$2,160,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$2,480,000
	Sub-Total					\$65,760,000
	Mobilization & Indirect Field Cost		15%			\$9,864,000
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$75,624,000
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

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DATE: 6/16/2003

PROJECT: California High Speed Train EIR/EIS

Intermediate Stations

CONCEPTUAL CONSTRUCTION COST ESTIMATE

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Los Banos Station (Segment 13 - Undeveloped at-grade)					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	-	\$0	
	Site Demolition	HECT	\$800,000.00	-	\$0	
						\$0
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	38,000.00	\$285,000	
						\$285,000
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	At Grade					\$0
6	Track work					
	Ballasted Track Incl. Ballast and subballast	M	\$430.00	3,760	\$1,616,800	
	Turnouts, No. 50 W. Conc. Ties	EA	\$700,000.00	4	\$2,800,000	
	Crossover, No. 50 w. Conc. Ties	EA	\$1,500,000.00	4	\$6,000,000	
	Bumping Posts	EA	\$50,000.00		\$0	
	Heavy Duty Rubber Grade Crossing					\$10,416,800
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					\$0
8	Traction Power					
	(Included in Overall Estimate)					\$0
9	Train Control					
	(Included in Overall Estimate)					\$0
10	Station Platform					
	Platforms:					
	Foundation- Pier Caissons	SM	170	10,800	\$1,836,000	
	Pier Caps	SM	\$175.00	10,800	\$1,890,000	
	Platform Slab	SM	\$120.00	10,800	\$1,296,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	2,400	\$600,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	10,800	\$3,672,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	10,800	\$1,728,000	
	Station Lighting	SM	\$130.00	10,800	\$1,404,000	
	Signage	platform	\$5,000.00	3	\$15,000	
	Platform Furnishing	platform	\$45,000.00	3	\$135,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	12	\$240,000	
						\$12,816,000
11	Station Building & Access to Platforms					
	Passenger Terminal (180'x65' Foot Print)	SM	\$540.00	2,100	\$1,134,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$1,454,000
	Sub-Total					\$24,970,000
	Mobilization & Indirect Field Cost		15%			\$3,745,500
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$28,715,500
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

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DATE: 6/16/2003

PROJECT: California High Speed Train EIR/EIS**Intermediate Stations****CONCEPTUAL CONSTRUCTION COST ESTIMATE**

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Morgan Hill Station (Segment 14 - Aerial Suburban)					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	4.00	\$30,800	
	Site Demolition	HECT	\$800,000.00	4.00	\$3,200,000	
						\$3,230,800
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	-	\$0	
						\$0
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	Aerial Structure	HECT	\$10,750,000.00	11.00	\$118,250,000	
						\$118,250,000
6	Track work					
	Direct Fixation	M	\$800.23	4,860	\$3,889,118	
	Turnouts, No. 32.7 W. Conc. Ties	EA	\$365,000.00	4	\$1,460,000	
	Crossover, No. 32.7 w. Conc. Ties	EA	\$750,000.00	4	\$3,000,000	
	Bumping Posts	EA	\$50,000.00		\$0	
	Heavy Duty Rubber Grade Crossing					
						\$8,349,118
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					
						\$0
8	Traction Power					
	(Included in Overall Estimate)					
						\$0
9	Train Control					
	(Included in Overall Estimate)					
						\$0
10	Station Platform					
	Platforms:					
	Foundation- Pier Caissons	SM	170	7,200	\$1,224,000	
	Pier Caps	SM	\$175.00	7,200	\$1,260,000	
	Platform Slab	SM	\$120.00	7,200	\$864,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	800	\$200,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	7,200	\$2,448,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	7,200	\$1,152,000	
	Station Lighting	SM	\$130.00	7,200	\$936,000	
	Signage	platform	\$5,000.00	2	\$10,000	
	Platform Furnishing	platform	\$45,000.00	2	\$90,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	8	\$160,000	
						\$8,344,000
11	Station Building & Access to Platforms					
	Passenger Terminal (300'x200' Foot Print)	SM	\$540.00	11,000	\$5,940,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$6,260,000
	Sub-Total					\$144,430,000
	Mobilization & Indirect Field Cost		15%			\$21,664,500
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$166,094,500
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

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PREPARED BY: SM

CHECKED BY:

DATE: 6/16/2003

PROJECT: California High Speed Train EIR/EIS**Intermediate Stations****CONCEPTUAL CONSTRUCTION COST ESTIMATE**

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Modesto Downtown Station (Suburban)					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	2.00	\$15,400	
	Site Demolition	HECT	\$800,000.00	2.00	\$1,600,000	
						\$1,615,400
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	-	\$0	
						\$0
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	Aerial Structure	HECT	\$10,750,000.00	11.00	\$118,250,000	
						\$118,250,000
6	Track work					
	Direct Fixation	M	\$430.00	10,000	\$4,300,000	
	Turnouts, No. 50 W. Conc. Ties	EA	\$700,000.00	4	\$2,800,000	
	Crossover, No. 50 w. Conc. Ties	EA	\$1,500,000.00	4	\$6,000,000	
	Bumping Posts	EA	\$50,000.00		\$0	
	Heavy Duty Rubber Grade Crossing					
						\$13,100,000
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					
						\$0
8	Traction Power					
	(Included in Overall Estimate)					
						\$0
9	Train Control					
	(Included in Overall Estimate)					
						\$0
10	Station Platform					
	Platforms:					
	Foundation- Pier Caissons	SM	170	7,200	\$1,224,000	
	Pier Caps	SM	\$175.00	7,200	\$1,260,000	
	Platform Slab	SM	\$120.00	7,200	\$864,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	800	\$200,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	7,200	\$2,448,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	7,200	\$1,152,000	
	Station Lighting	SM	\$130.00	7,200	\$936,000	
	Signage	platform	\$5,000.00	2	\$10,000	
	Platform Furnishing	platform	\$45,000.00	2	\$90,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	8	\$160,000	
						\$8,344,000
11	Station Building & Access to Platforms					
	Passenger Terminal (185'x105' Foot Print)	SM	\$540.00	3,500	\$1,890,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$2,210,000
	Sub-Total					\$143,520,000
	Mobilization & Indirect Field Cost		15%			\$21,528,000
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$165,048,000
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

PARSONS BRINCKERHOFF

PREPARED BY: SM

CHECKED BY:

DATE: 6/16/2003

PROJECT: California High Speed Train EIR/EIS**Intermediate Stations****CONCEPTUAL CONSTRUCTION COST ESTIMATE**

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Amtrak Briggsmore Station (Suburban)					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	4.00	\$30,800	
	Site Demolition	HECT	\$800,000.00	4.00	\$3,200,000	
						\$3,230,800
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	38,000.00	\$285,000	
						\$285,000
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	At Grade				\$0	
						\$0
6	Track work					
	Ballasted Track Incl. Ballast and subballast	M	\$430.00	3,760	\$1,616,800	
	Turnouts, No. 50 W. Conc. Ties	EA	\$700,000.00	4	\$2,800,000	
	Crossover, No. 50 w. Conc. Ties	EA	\$1,500,000.00	4	\$6,000,000	
	Bumping Posts	EA	\$50,000.00		\$0	
	Heavy Duty Rubber Grade Crossing					
						\$10,416,800
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					
						\$0
8	Traction Power					
	(Included in Overall Estimate)					
						\$0
9	Train Control					
	(Included in Overall Estimate)					
						\$0
10	Station Platform					
	Platforms:					
	Foundation- Pier Caissons	SM	170	10,800	\$1,836,000	
	Pier Caps	SM	\$175.00	10,800	\$1,890,000	
	Platform Slab	SM	\$120.00	10,800	\$1,296,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	2,400	\$600,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	10,800	\$3,672,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	10,800	\$1,728,000	
	Station Lighting	SM	\$130.00	10,800	\$1,404,000	
	Signage	platform	\$5,000.00	3	\$15,000	
	Platform Furnishing	platform	\$45,000.00	3	\$135,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	12	\$240,000	
						\$12,816,000
11	Station Building & Access to Platforms					
	Passenger Terminal (180'x65' Foot Print)	SM	\$540.00	2,100	\$1,134,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$1,454,000
	Sub-Total					\$28,200,000
	Mobilization & Indirect Field Cost		15%			\$4,230,000
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$32,430,000
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

PARSONS BRINCKERHOFF

PREPARED BY: SM

CHECKED BY:

DATE: 6/16/2003

PROJECT: California High Speed Train EIR/EIS

Intermediate Stations

CONCEPTUAL CONSTRUCTION COST ESTIMATE

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Merced Downtown Station (Suburban)					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	4.00	\$30,800	
	Site Demolition	HECT	\$800,000.00	4.00	\$3,200,000	
						\$3,230,800
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	38,000.00	\$285,000	
						\$285,000
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	At Grade				\$0	
						\$0
6	Track work					
	Ballasted Track Incl. Ballast and subballast	M	\$430.00	3,760	\$1,616,800	
	Turnouts, No. 50 W. Conc. Ties	EA	\$700,000.00	4	\$2,800,000	
	Crossover, No. 50 w. Conc. Ties	EA	\$1,500,000.00	4	\$6,000,000	
	Bumping Posts	EA	\$50,000.00		\$0	
	Heavy Duty Rubber Grade Crossing					\$10,416,800
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					
						\$0
8	Traction Power					
	(Included in Overall Estimate)					\$0
9	Train Control					
	(Included in Overall Estimate)					\$0
10	Station Platform					
	Platforms:					
	Foundation- Pier Caissons	SM	170	10,800	\$1,836,000	
	Pier Caps	SM	\$175.00	10,800	\$1,890,000	
	Platform Slab	SM	\$120.00	10,800	\$1,296,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	2,400	\$600,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	10,800	\$3,672,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	10,800	\$1,728,000	
	Station Lighting	SM	\$130.00	10,800	\$1,404,000	
	Signage	platform	\$5,000.00	3	\$15,000	
	Platform Furnishing	platform	\$45,000.00	3	\$135,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	12	\$240,000	
						\$12,816,000
11	Station Building & Access to Platforms					
	Passenger Terminal (180'x65' Foot Print)	SM	\$540.00	2,100	\$1,134,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$1,454,000
	Sub-Total					\$28,200,000
	Mobilization & Indirect Field Cost		15%			\$4,230,000
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$32,430,000
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

PARSONS BRINCKERHOFF

PREPARED BY: SM

CHECKED BY:

DATE: 6/16/2003

PROJECT: California High Speed Train EIR/EIS

Intermediate Stations

CONCEPTUAL CONSTRUCTION COST ESTIMATE

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Merced Municipal Airport Station (Suburban)					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	4.00	\$30,800	
	Site Demolition	HECT	\$800,000.00	4.00	\$3,200,000	
						\$3,230,800
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	38,000.00	\$285,000	
						\$285,000
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	At Grade				\$0	
						\$0
6	Track work					
	Ballasted Track Incl. Ballast and subballast	M	\$430.00	3,760	\$1,616,800	
	Turnouts, No. 50 W. Conc. Ties	EA	\$700,000.00	4	\$2,800,000	
	Crossover, No. 50 w. Conc. Ties	EA	\$1,500,000.00	4	\$6,000,000	
	Bumping Posts	EA	\$50,000.00		\$0	
	Heavy Duty Rubber Grade Crossing					
						\$10,416,800
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					
						\$0
8	Traction Power					
	(Included in Overall Estimate)					
						\$0
9	Train Control					
	(Included in Overall Estimate)					
						\$0
10	Station Platform					
	Platforms:					
	Foundation- Pier Caissons	SM	170	10,800	\$1,836,000	
	Pier Caps	SM	\$175.00	10,800	\$1,890,000	
	Platform Slab	SM	\$120.00	10,800	\$1,296,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	2,400	\$600,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	10,800	\$3,672,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	10,800	\$1,728,000	
	Station Lighting	SM	\$130.00	10,800	\$1,404,000	
	Signage	platform	\$5,000.00	3	\$15,000	
	Platform Furnishing	platform	\$45,000.00	3	\$135,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	12	\$240,000	
						\$12,816,000
11	Station Building & Access to Platforms					
	Passenger Terminal (180'x65' Foot Print)	SM	\$540.00	2,100	\$1,134,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$1,454,000
	Sub-Total					\$28,200,000
	Mobilization & Indirect Field Cost		15%			\$4,230,000
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$32,430,000
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

PARSONS BRINCKERHOFF

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DATE: 6/16/2003

PROJECT: California High Speed Train EIR/EIS

Intermediate Stations

CONCEPTUAL CONSTRUCTION COST ESTIMATE

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Castle Air Force Base Station (Suburban)					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	4.00	\$30,800	
	Site Demolition	HECT	\$800,000.00	4.00	\$3,200,000	
						\$3,230,800
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	38,000.00	\$285,000	
						\$285,000
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	At Grade				\$0	
						\$0
6	Track work					
	Ballasted Track Incl. Ballast and subballast	M	\$430.00	3,760	\$1,616,800	
	Turnouts, No. 50 W. Conc. Ties	EA	\$700,000.00	4	\$2,800,000	
	Crossover, No. 50 w. Conc. Ties	EA	\$1,500,000.00	4	\$6,000,000	
	Bumping Posts	EA	\$50,000.00		\$0	
	Heavy Duty Rubber Grade Crossing					\$10,416,800
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					
						\$0
8	Traction Power					
	(Included in Overall Estimate)					\$0
9	Train Control					
	(Included in Overall Estimate)					\$0
10	Station Platform					
	Platforms:					
	Foundation- Pier Caissons	SM	170	10,800	\$1,836,000	
	Pier Caps	SM	\$175.00	10,800	\$1,890,000	
	Platform Slab	SM	\$120.00	10,800	\$1,296,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	2,400	\$600,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	10,800	\$3,672,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	10,800	\$1,728,000	
	Station Lighting	SM	\$130.00	10,800	\$1,404,000	
	Signage	platform	\$5,000.00	3	\$15,000	
	Platform Furnishing	platform	\$45,000.00	3	\$135,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	12	\$240,000	
						\$12,816,000
11	Station Building & Access to Platforms					
	Passenger Terminal (180'x65' Foot Print)	SM	\$540.00	2,100	\$1,134,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$1,454,000
	Sub-Total					\$28,200,000
	Mobilization & Indirect Field Cost		15%			\$4,230,000
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$32,430,000
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

PARSONS BRINCKERHOFF

PREPARED BY: SM

CHECKED BY:

DATE: 6/16/2003

PROJECT: California High Speed Train EIR/EIS

Intermediate Stations

CONCEPTUAL CONSTRUCTION COST ESTIMATE

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Fresno Downtown Station (Urban)					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	4.00	\$30,800	
	Site Demolition	HECT	\$800,000.00	4.00	\$3,200,000	
						\$3,230,800
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	150,000.00	\$1,125,000	
						\$1,125,000
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	At grade				\$0	
						\$0
6	Track work					
	Ballasted Track Incl. Ballast and subballast	M	\$430.00	10,000	\$4,300,000	
	Turnouts, No. 50 W. Conc. Ties	EA	\$700,000.00	4	\$2,800,000	
	Crossover, No. 50 w. Conc. Ties	EA	\$1,500,000.00	4	\$6,000,000	
	Bumping Posts	EA	\$50,000.00		\$0	
	Heavy Duty Rubber Grade Crossing					
						\$13,100,000
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					
						\$0
8	Traction Power					
	(Included in Overall Estimate)					
						\$0
9	Train Control					
	(Included in Overall Estimate)					
						\$0
10	Station Platform					
	Platforms:					
	Foundation- Pier Caissons	SM	170	7,200	\$1,224,000	
	Pier Caps	SM	\$175.00	7,200	\$1,260,000	
	Platform Slab	SM	\$120.00	7,200	\$864,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	800	\$200,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	7,200	\$2,448,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	7,200	\$1,152,000	
	Station Lighting	SM	\$130.00	7,200	\$936,000	
	Signage	platform	\$5,000.00	2	\$10,000	
	Platform Furnishing	platform	\$45,000.00	2	\$90,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	8	\$160,000	
						\$8,344,000
11	Station Building & Access to Platforms					
	Passenger Terminal (185'x120' Foot Print)	SM	\$540.00	4,000	\$2,160,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$2,480,000
	Sub-Total					\$28,280,000
	Mobilization & Indirect Field Cost		15%			\$4,242,000
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$32,522,000
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

PARSONS BRINCKERHOFF

PREPARED BY: SM

CHECKED BY:

DATE: 6/16/2003

PROJECT: California High Speed Train EIR/EIS

Intermediate Stations

CONCEPTUAL CONSTRUCTION COST ESTIMATE

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Visalia Airport Station (Undeveloped)					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	-	\$0	
	Site Demolition	HECT	\$800,000.00	-	\$0	
						\$0
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	38,000.00	\$285,000	
						\$285,000
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	At Grade				\$0	
						\$0
6	Track work					
	Ballasted Track Incl. Ballast and subballast	M	\$430.00	3,760	\$1,616,800	
	Turnouts, No. 50 W. Conc. Ties	EA	\$700,000.00	4	\$2,800,000	
	Crossover, No. 50 w. Conc. Ties	EA	\$1,500,000.00	4	\$6,000,000	
	Bumping Posts	EA	\$50,000.00		\$0	
	Heavy Duty Rubber Grade Crossing					
						\$10,416,800
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					
						\$0
8	Traction Power					
	(Included in Overall Estimate)					
						\$0
9	Train Control					
	(Included in Overall Estimate)					
						\$0
10	Station Platform					
	Platforms:					
	Foundation- Pier Caissons	SM	170	10,800	\$1,836,000	
	Pier Caps	SM	\$175.00	10,800	\$1,890,000	
	Platform Slab	SM	\$120.00	10,800	\$1,296,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	2,400	\$600,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	10,800	\$3,672,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	10,800	\$1,728,000	
	Station Lighting	SM	\$130.00	10,800	\$1,404,000	
	Signage	platform	\$5,000.00	3	\$15,000	
	Platform Furnishing	platform	\$45,000.00	3	\$135,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	12	\$240,000	
						\$12,816,000
11	Station Building & Access to Platforms					
	Passenger Terminal (180'x65' Foot Print)	SM	\$540.00	2,100	\$1,134,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$1,454,000
	Sub-Total					\$24,970,000
	Mobilization & Indirect Field Cost		15%			\$3,745,500
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$28,715,500
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

PARSONS BRINCKERHOFF

PREPARED BY: SM

CHECKED BY:

DATE: 6/16/2003

PROJECT: California High Speed Train EIR/EIS

Intermediate Stations

CONCEPTUAL CONSTRUCTION COST ESTIMATE

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Hanford Station (Undeveloped)					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	-	\$0	
	Site Demolition	HECT	\$800,000.00	-	\$0	
						\$0
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	38,000.00	\$285,000	
						\$285,000
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	At Grade				\$0	
						\$0
6	Track work					
	Ballasted Track Incl. Ballast and subballast	M	\$430.00	3,760	\$1,616,800	
	Turnouts, No. 50 W. Conc. Ties	EA	\$700,000.00	4	\$2,800,000	
	Crossover, No. 50 w. Conc. Ties	EA	\$1,500,000.00	4	\$6,000,000	
	Bumping Posts	EA	\$50,000.00		\$0	
	Heavy Duty Rubber Grade Crossing					
						\$10,416,800
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					
						\$0
8	Traction Power					
	(Included in Overall Estimate)					
						\$0
9	Train Control					
	(Included in Overall Estimate)					
						\$0
10	Station Platform					
	Platforms:					
	Foundation- Pier Caissons	SM	170	10,800	\$1,836,000	
	Pier Caps	SM	\$175.00	10,800	\$1,890,000	
	Platform Slab	SM	\$120.00	10,800	\$1,296,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	2,400	\$600,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	10,800	\$3,672,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	10,800	\$1,728,000	
	Station Lighting	SM	\$130.00	10,800	\$1,404,000	
	Signage	platform	\$5,000.00	3	\$15,000	
	Platform Furnishing	platform	\$45,000.00	3	\$135,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	12	\$240,000	
						\$12,816,000
11	Station Building & Access to Platforms					
	Passenger Terminal (180'x65' Foot Print)	SM	\$540.00	2,100	\$1,134,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$1,454,000
	Sub-Total					\$24,970,000
	Mobilization & Indirect Field Cost		15%			\$3,745,500
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$28,715,500
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

PARSONS BRINCKERHOFF

PREPARED BY: SM

CHECKED BY:

DATE: 6/16/2003

PROJECT: California High Speed Train EIR/EIS

Intermediate Stations

CONCEPTUAL CONSTRUCTION COST ESTIMATE

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Bakersfield Airport Station (Suburban)					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	4.00	\$30,800	
	Site Demolition	HECT	\$800,000.00	4.00	\$3,200,000	
						\$3,230,800
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	38,000.00	\$285,000	
						\$285,000
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	At Grade				\$0	
						\$0
6	Track work					
	Ballasted Track Incl. Ballast and subballast	M	\$430.00	3,760	\$1,616,800	
	Turnouts, No. 50 W. Conc. Ties	EA	\$700,000.00	4	\$2,800,000	
	Crossover, No. 50 w. Conc. Ties	EA	\$1,500,000.00	4	\$6,000,000	
	Bumping Posts	EA	\$50,000.00		\$0	
	Heavy Duty Rubber Grade Crossing					\$10,416,800
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					
						\$0
8	Traction Power					
	(Included in Overall Estimate)					\$0
9	Train Control					
	(Included in Overall Estimate)					\$0
10	Station Platform					
	Platforms:					
	Foundation- Pier Caissons	SM	170	10,800	\$1,836,000	
	Pier Caps	SM	\$175.00	10,800	\$1,890,000	
	Platform Slab	SM	\$120.00	10,800	\$1,296,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	2,400	\$600,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	10,800	\$3,672,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	10,800	\$1,728,000	
	Station Lighting	SM	\$130.00	10,800	\$1,404,000	
	Signage	platform	\$5,000.00	3	\$15,000	
	Platform Furnishing	platform	\$45,000.00	3	\$135,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	12	\$240,000	
						\$12,816,000
11	Station Building & Access to Platforms					
	Passenger Terminal (180'x65' Foot Print)	SM	\$540.00	2,100	\$1,134,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$1,454,000
	Sub-Total					\$28,200,000
	Mobilization & Indirect Field Cost		15%			\$4,230,000
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$32,430,000
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

PARSONS BRINCKERHOFF

PREPARED BY: SM

CHECKED BY:

DATE: 6/16/2003

PROJECT: California High Speed Train EIR/EIS**Intermediate Stations****CONCEPTUAL CONSTRUCTION COST ESTIMATE**

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Bakersfield Golden State Station (Urban)					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	4.00	\$30,800	
	Site Demolition	HECT	\$800,000.00	4.00	\$3,200,000	
						\$3,230,800
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	150,000.00	\$1,125,000	
						\$1,125,000
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	At grade				\$0	
						\$0
6	Track work					
	Ballasted Track Incl. Ballast and subballast	M	\$430.00	10,000	\$4,300,000	
	Turnouts, No. 50 W. Conc. Ties	EA	\$700,000.00	4	\$2,800,000	
	Crossover, No. 50 w. Conc. Ties	EA	\$1,500,000.00	4	\$6,000,000	
	Bumping Posts	EA	\$50,000.00		\$0	
	Heavy Duty Rubber Grade Crossing					
						\$13,100,000
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					
						\$0
8	Traction Power					
	(Included in Overall Estimate)					
						\$0
9	Train Control					
	(Included in Overall Estimate)					
						\$0
10	Station Platform					
	Platforms:					
	Foundation- Pier Caissons	SM	170	7,200	\$1,224,000	
	Pier Caps	SM	\$175.00	7,200	\$1,260,000	
	Platform Slab	SM	\$120.00	7,200	\$864,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	800	\$200,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	7,200	\$2,448,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	7,200	\$1,152,000	
	Station Lighting	SM	\$130.00	7,200	\$936,000	
	Signage	platform	\$5,000.00	2	\$10,000	
	Platform Furnishing	platform	\$45,000.00	2	\$90,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	8	\$160,000	
						\$8,344,000
11	Station Building & Access to Platforms					
	Passenger Terminal (185'x105' Foot Print)	SM	\$540.00	3,500	\$1,890,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$2,210,000
	Sub-Total					\$28,010,000
	Mobilization & Indirect Field Cost		15%			\$4,201,500
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$32,211,500
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

PARSONS BRINCKERHOFF

PREPARED BY: SM

CHECKED BY:

DATE: 6/16/2003

PROJECT: California High Speed Train EIR/EIS**Intermediate Stations****CONCEPTUAL CONSTRUCTION COST ESTIMATE**

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Bakersfield - Truxton Union Avenue Station (Urban)					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	4.00	\$30,800	
	Site Demolition	HECT	\$800,000.00	4.00	\$3,200,000	
						\$3,230,800
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	38,000.00	\$285,000	
						\$285,000
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	At Grade				\$0	
						\$0
6	Track work					
	Ballasted Track Incl. Ballast and subballast	M	\$430.00	3,760	\$1,616,800	
	Turnouts, No. 50 W. Conc. Ties	EA	\$700,000.00	4	\$2,800,000	
	Crossover, No. 50 w. Conc. Ties	EA	\$1,500,000.00	4	\$6,000,000	
	Bumping Posts	EA	\$50,000.00		\$0	
	Heavy Duty Rubber Grade Crossing					
						\$10,416,800
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					
						\$0
8	Traction Power					
	(Included in Overall Estimate)					
						\$0
9	Train Control					
	(Included in Overall Estimate)					
						\$0
10	Station Platform					
	Platforms:					
	Foundation- Pier Caissons	SM	170	10,800	\$1,836,000	
	Pier Caps	SM	\$175.00	10,800	\$1,890,000	
	Platform Slab	SM	\$120.00	10,800	\$1,296,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	2,400	\$600,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	10,800	\$3,672,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	10,800	\$1,728,000	
	Station Lighting	SM	\$130.00	10,800	\$1,404,000	
	Signage	platform	\$5,000.00	3	\$15,000	
	Platform Furnishing	platform	\$45,000.00	3	\$135,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	12	\$240,000	
						\$12,816,000
11	Station Building & Access to Platforms					
	Passenger Terminal (180'x65' Foot Print)	SM	\$540.00	2,100	\$1,134,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$1,454,000
	Sub-Total					\$28,200,000
	Mobilization & Indirect Field Cost		15%			\$4,230,000
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$32,430,000
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

PARSONS BRINCKERHOFF

PREPARED BY: SM

CHECKED BY:

DATE: 6/16/2003

PROJECT: California High Speed Train EIR/EIS

Intermediate Stations

CONCEPTUAL CONSTRUCTION COST ESTIMATE

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Bakersfield - Truxton Amtrak Station (Urban)					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	2.00	\$15,400	
	Site Demolition	HECT	\$800,000.00	2.00	\$1,600,000	
						\$1,615,400
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	-	\$0	
						\$0
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	Aerial Structure	HECT	\$10,750,000.00	11.00	\$118,250,000	
						\$118,250,000
6	Track work					
	Direct Fixation	M	\$430.00	10,000	\$4,300,000	
	Turnouts, No. 50 W. Conc. Ties	EA	\$700,000.00	4	\$2,800,000	
	Crossover, No. 50 w. Conc. Ties	EA	\$1,500,000.00	4	\$6,000,000	
	Bumping Posts	EA	\$50,000.00		\$0	
	Heavy Duty Rubber Grade Crossing					
						\$13,100,000
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					
						\$0
8	Traction Power					
	(Included in Overall Estimate)					
						\$0
9	Train Control					
	(Included in Overall Estimate)					
						\$0
10	Station Platform					
	Platforms:					
	Foundation- Pier Caissons	SM	170	7,200	\$1,224,000	
	Pier Caps	SM	\$175.00	7,200	\$1,260,000	
	Platform Slab	SM	\$120.00	7,200	\$864,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	800	\$200,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	7,200	\$2,448,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	7,200	\$1,152,000	
	Station Lighting	SM	\$130.00	7,200	\$936,000	
	Signage	platform	\$5,000.00	2	\$10,000	
	Platform Furnishing	platform	\$45,000.00	2	\$90,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	8	\$160,000	
						\$8,344,000
11	Station Building & Access to Platforms					
	Passenger Terminal (185'x105' Foot Print)	SM	\$540.00	3,500	\$1,890,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$2,210,000
	Sub-Total					\$143,520,000
	Mobilization & Indirect Field Cost		15%			\$21,528,000
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$165,048,000
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

PARSONS BRINCKERHOFF

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DATE: 6/16/2003

PROJECT: California High Speed Train EIR/EIS

Intermediate Stations

CONCEPTUAL CONSTRUCTION COST ESTIMATE

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Palmdale Transportation Center (At-grade Suburban)					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	4.00	\$30,800	
	Site Demolition	HECT	\$800,000.00	4.00	\$3,200,000	
						\$3,230,800
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	38,000.00	\$285,000	
						\$285,000
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	At Grade				\$0	
						\$0
6	Track work					
	Ballasted Track Incl. Ballast and subballast	M	\$430.00	3,760	\$1,616,800	
	Turnouts, No. 50 W. Conc. Ties	EA	\$700,000.00	4	\$2,800,000	
	Crossover, No. 50 w. Conc. Ties	EA	\$1,500,000.00	4	\$6,000,000	
	Bumping Posts	EA	\$50,000.00		\$0	
	Heavy Duty Rubber Grade Crossing					
						\$10,416,800
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					
						\$0
8	Traction Power					
	(Included in Overall Estimate)					
						\$0
9	Train Control					
	(Included in Overall Estimate)					
						\$0
10	Station Platform					
	Platforms:					
	Foundation- Pier Caissons	SM	170	10,800	\$1,836,000	
	Pier Caps	SM	\$175.00	10,800	\$1,890,000	
	Platform Slab	SM	\$120.00	10,800	\$1,296,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	2,400	\$600,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	10,800	\$3,672,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	10,800	\$1,728,000	
	Station Lighting	SM	\$130.00	10,800	\$1,404,000	
	Signage	platform	\$5,000.00	3	\$15,000	
	Platform Furnishing	platform	\$45,000.00	3	\$135,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	12	\$240,000	
						\$12,816,000
11	Station Building & Access to Platforms					
	Passenger Terminal (180'x65' Foot Print)	SM	\$540.00	2,100	\$1,134,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$1,454,000
	Sub-Total					\$28,200,000
	Mobilization & Indirect Field Cost		15%			\$4,230,000
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$32,430,000
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

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DATE: 6/16/2003

PROJECT: California High Speed Train EIR/EIS**Intermediate Stations****CONCEPTUAL CONSTRUCTION COST ESTIMATE**

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Sylmar Station (Aerial - Urban)					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	2.00	\$15,400	
	Site Demolition	HECT	\$800,000.00	2.00	\$1,600,000	
						\$1,615,400
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	150,000.00	\$1,125,000	
						\$1,125,000
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	Aerial Structure	HECT	\$10,750,000.00	11.00	\$118,250,000	
						\$118,250,000
6	Track work					
	Direct Fixation	M	\$800.23	10,000	\$8,002,300	
	Turnouts, No. 50 W. Conc. Ties	EA	\$700,000.00	4	\$2,800,000	
	Crossover, No. 50 w. Conc. Ties	EA	\$1,500,000.00	4	\$6,000,000	
	Bumping Posts	EA	\$50,000.00		\$0	
	Heavy Duty Rubber Grade Crossing					
						\$16,802,300
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					
						\$0
8	Traction Power					
	(Included in Overall Estimate)					
						\$0
9	Train Control					
	(Included in Overall Estimate)					
						\$0
10	Station Platform					
	Platforms:					
	Foundation- Pier Caissons	SM	170	7,200	\$1,224,000	
	Pier Caps	SM	\$175.00	7,200	\$1,260,000	
	Platform Slab	SM	\$120.00	7,200	\$864,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	800	\$200,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	7,200	\$2,448,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	7,200	\$1,152,000	
	Station Lighting	SM	\$130.00	7,200	\$936,000	
	Signage	platform	\$5,000.00	2	\$10,000	
	Platform Furnishing	platform	\$45,000.00	2	\$90,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	8	\$160,000	
						\$8,344,000
11	Station Building & Access to Platforms					
	Passenger Terminal (200'x150' Foot Print)	SM	\$540.00	5,500	\$2,970,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$3,290,000
	Sub-Total					\$149,430,000
	Mobilization & Indirect Field Cost		15%			\$22,414,500
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$171,844,500
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

PARSONS BRINCKERHOFF

PREPARED BY: SM

CHECKED BY:

DATE: 6/16/2003

PROJECT: California High Speed Train EIR/EIS**Intermediate Stations****CONCEPTUAL CONSTRUCTION COST ESTIMATE**

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Burbank Airport Station (Trench - Urban)					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	2.00	\$15,400	
	Site Demolition	HECT	\$800,000.00	2.00	\$1,600,000	
						\$1,615,400
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3				\$0
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	Cut & Cover Structure - Incl. Earthwork, Support System & Structure	HECT	\$26,206,000.00	11.00	\$288,266,000	
						\$288,266,000
6	Track work					
	Direct Fixation	M	\$800.23	10,000	\$8,002,300	
	Turnouts, No. 50 W. Conc. Ties	EA	\$700,000.00	4	\$2,800,000	
	Crossover, No. 50 w. Conc. Ties	EA	\$1,500,000.00	4	\$6,000,000	
	Bumping Posts	EA	\$50,000.00		\$0	
	Heavy Duty Rubber Grade Crossing					\$16,802,300
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					\$0
8	Traction Power					
	(Included in Overall Estimate)					\$0
9	Train Control					
	(Included in Overall Estimate)					\$0
10	Station Platform					
	Platforms:					
	Foundation- Pier Caissons	SM	170	7,200	\$1,224,000	
	Pier Caps	SM	\$175.00	7,200	\$1,260,000	
	Platform Slab	SM	\$120.00	7,200	\$864,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	800	\$200,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	7,200	\$2,448,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	7,200	\$1,152,000	
	Station Lighting	SM	\$130.00	7,200	\$936,000	
	Signage	platform	\$5,000.00	2	\$10,000	
	Platform Furnishing	platform	\$45,000.00	2	\$90,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	8	\$160,000	
						\$8,344,000
11	Station Building & Access to Platforms					
	Passenger Terminal (200'x150' Foot Print)	SM	\$540.00	5,500	\$2,970,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$3,290,000
	Sub-Total					\$318,320,000
	Mobilization & Indirect Field Cost		15%			\$47,748,000
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$366,068,000
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

PARSONS BRINCKERHOFF

PREPARED BY: SM

CHECKED BY:

DATE: 6/16/2003

PROJECT: California High Speed Train EIR/EIS

Intermediate Stations

CONCEPTUAL CONSTRUCTION COST ESTIMATE

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Burbank Downtown Station (Aerial Metrolink & I-5 Variant)					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	2.00	\$15,400	
	Site Demolition	HECT	\$800,000.00	2.00	\$1,600,000	
						\$1,615,400
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	150,000.00	\$1,125,000	
						\$1,125,000
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	Aerial Structure	HECT	\$10,750,000.00	11.00	\$118,250,000	
						\$118,250,000
6	Track work					
	Direct Fixation	M	\$800.23	10,000	\$8,002,300	
	Turnouts, No. 50 W. Conc. Ties	EA	\$700,000.00	4	\$2,800,000	
	Crossover, No. 50 w. Conc. Ties	EA	\$1,500,000.00	4	\$6,000,000	
	Bumping Posts	EA	\$50,000.00		\$0	
	Heavy Duty Rubber Grade Crossing					
						\$16,802,300
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					
						\$0
8	Traction Power					
	(Included in Overall Estimate)					
						\$0
9	Train Control					
	(Included in Overall Estimate)					
						\$0
10	Station Platform					
	Platforms:					
	Foundation- Pier Caissons	SM	170	7,200	\$1,224,000	
	Pier Caps	SM	\$175.00	7,200	\$1,260,000	
	Platform Slab	SM	\$120.00	7,200	\$864,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	800	\$200,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	7,200	\$2,448,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	7,200	\$1,152,000	
	Station Lighting	SM	\$130.00	7,200	\$936,000	
	Signage	platform	\$5,000.00	2	\$10,000	
	Platform Furnishing	platform	\$45,000.00	2	\$90,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	8	\$160,000	
						\$8,344,000
11	Station Building & Access to Platforms					
	Passenger Terminal (200'x150' Foot Print)	SM	\$540.00	5,500	\$2,970,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$3,290,000
	Sub-Total					\$149,430,000
	Mobilization & Indirect Field Cost		15%			\$22,414,500
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$171,844,500
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

PARSONS BRINCKERHOFF

PREPARED BY: SM

CHECKED BY:

DATE: 6/16/2003

PROJECT: California High Speed Train EIR/EIS

Intermediate Stations

CONCEPTUAL CONSTRUCTION COST ESTIMATE

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	El Monte Station (at-grade, near exist tracks - Suburban)					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	4.00	\$30,800	
	Site Demolition	HECT	\$800,000.00	4.00	\$3,200,000	
						\$3,230,800
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	105,000.00	\$787,500	
						\$787,500
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	at grade					
						\$0
6	Track work					
	Ballasted Track Incl. Ballast and subballast	M	\$430.00	7,000	\$3,010,000	
	Turnouts, No. 40.5 W. Conc. Ties	EA	\$400,000.00	4	\$1,600,000	
	Crossover, No. 40.5 w. Conc. Ties	EA	\$800,000.00	4	\$3,200,000	
	Bumping Posts	EA	\$50,000.00		\$0	
	Heavy Duty Rubber Grade Crossing					
						\$7,810,000
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					
						\$0
8	Traction Power					
	(Included in Overall Estimate)					
						\$0
9	Train Control					
	(Included in Overall Estimate)					
						\$0
10	Station Platform					
	Platforms:					
	Foundation- Pier Caissons	SM	170	7,200	\$1,224,000	
	Pier Caps	SM	\$175.00	7,200	\$1,260,000	
	Platform Slab	SM	\$120.00	7,200	\$864,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	800	\$200,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	7,200	\$2,448,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	7,200	\$1,152,000	
	Station Lighting	SM	\$130.00	7,200	\$936,000	
	Signage	platform	\$5,000.00	2	\$10,000	
	Platform Furnishing	platform	\$45,000.00	2	\$90,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	8	\$160,000	
						\$8,344,000
11	Station Building & Access to Platforms					
	Passenger Terminal (200'x150' Foot Print)	SM	\$540.00	5,500	\$2,970,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$3,290,000
	Sub-Total					\$23,460,000
	Mobilization & Indirect Field Cost		15%			\$3,519,000
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$26,979,000
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

PARSONS BRINCKERHOFF

PREPARED BY: SM

CHECKED BY:

DATE: 6/16/2003

PROJECT: California High Speed Train EIR/EIS**Intermediate Stations****CONCEPTUAL CONSTRUCTION COST ESTIMATE**

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Pomona Station (Aerial, near existing tracks - Suburban)					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	4.00	\$30,800	
	Site Demolition	HECT	\$800,000.00	4.00	\$3,200,000	
						\$3,230,800
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	105,000.00	\$787,500	
						\$787,500
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	Aerial Structure	HECT	\$10,750,000.00	11.00	\$118,250,000	
						\$118,250,000
6	Track work					
	Direct Fixation	M	\$800.23	7,000	\$5,601,610	
	Turnouts, No. 40.5 W. Conc. Ties	EA	\$400,000.00	4	\$1,600,000	
	Crossover, No. 40.5 w. Conc. Ties	EA	\$800,000.00	4	\$3,200,000	
	Bumping Posts	EA	\$50,000.00		\$0	
	Heavy Duty Rubber Grade Crossing					
						\$10,401,610
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					
						\$0
8	Traction Power					
	(Included in Overall Estimate)					
						\$0
9	Train Control					
	(Included in Overall Estimate)					
						\$0
10	Station Platform					
	Platforms:					
	Foundation- Pier Caissons	SM	170	7,200	\$1,224,000	
	Pier Caps	SM	\$175.00	7,200	\$1,260,000	
	Platform Slab	SM	\$120.00	7,200	\$864,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	800	\$200,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	7,200	\$2,448,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	7,200	\$1,152,000	
	Station Lighting	SM	\$130.00	7,200	\$936,000	
	Signage	platform	\$5,000.00	2	\$10,000	
	Platform Furnishing	platform	\$45,000.00	2	\$90,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	8	\$160,000	
						\$8,344,000
11	Station Building & Access to Platforms					
	Passenger Terminal (185'x105' Foot Print)	SM	\$540.00	3,500	\$1,890,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$2,210,000
	Sub-Total					\$143,220,000
	Mobilization & Indirect Field Cost		15%			\$21,483,000
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$164,703,000
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

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DATE: 6/16/2003

PROJECT: California High Speed Train EIR/EIS**Intermediate Stations****CONCEPTUAL CONSTRUCTION COST ESTIMATE**

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Ontario Station (At-grade, near exist tracks - Urban)					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	4.00	\$30,800	
	Site Demolition	HECT	\$800,000.00	4.00	\$3,200,000	
						\$3,230,800
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	105,000.00	\$787,500	
						\$787,500
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	at grade					
						\$0
6	Track work					
	Ballasted Track Incl. Ballast and subballast	M	\$430.00	7,000	\$3,010,000	
	Turnouts, No. 40.5 W. Conc. Ties	EA	\$400,000.00	4	\$1,600,000	
	Crossover, No. 40.5 w. Conc. Ties	EA	\$800,000.00	4	\$3,200,000	
	Bumping Posts	EA	\$50,000.00		\$0	
	Heavy Duty Rubber Grade Crossing					
						\$7,810,000
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					
						\$0
8	Traction Power					
	(Included in Overall Estimate)					
						\$0
9	Train Control					
	(Included in Overall Estimate)					
						\$0
10	Station Platform					
	Platforms:					
	Foundation- Pier Caissons	SM	170	7,200	\$1,224,000	
	Pier Caps	SM	\$175.00	7,200	\$1,260,000	
	Platform Slab	SM	\$120.00	7,200	\$864,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	800	\$200,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	7,200	\$2,448,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	7,200	\$1,152,000	
	Station Lighting	SM	\$130.00	7,200	\$936,000	
	Signage	platform	\$5,000.00	2	\$10,000	
	Platform Furnishing	platform	\$45,000.00	2	\$90,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	8	\$160,000	
						\$8,344,000
11	Station Building & Access to Platforms					
	Passenger Terminal (200'x150' Foot Print)	SM	\$540.00	5,500	\$2,970,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$3,290,000
	Sub-Total					\$23,460,000
	Mobilization & Indirect Field Cost		15%			\$3,519,000
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$26,979,000
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

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DATE: 6/16/2003

PROJECT: California High Speed Train EIR/EIS**Intermediate Stations****CONCEPTUAL CONSTRUCTION COST ESTIMATE**

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Colton Station (At-grade, near exist tracks - Suburban)					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	4.00	\$30,800	
	Site Demolition	HECT	\$800,000.00	4.00	\$3,200,000	
						\$3,230,800
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	105,000.00	\$787,500	
						\$787,500
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	at grade					
						\$0
6	Track work					
	Ballasted Track Incl. Ballast and subballast	M	\$430.00	7,000	\$3,010,000	
	Turnouts, No. 40.5 W. Conc. Ties	EA	\$400,000.00	4	\$1,600,000	
	Crossover, No. 40.5 w. Conc. Ties	EA	\$800,000.00	4	\$3,200,000	
	Bumping Posts	EA	\$50,000.00		\$0	
	Heavy Duty Rubber Grade Crossing					
						\$7,810,000
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					
						\$0
8	Traction Power					
	(Included in Overall Estimate)					
						\$0
9	Train Control					
	(Included in Overall Estimate)					
						\$0
10	Station Platform					
	Platforms:					
	Foundation- Pier Caissons	SM	170	7,200	\$1,224,000	
	Pier Caps	SM	\$175.00	7,200	\$1,260,000	
	Platform Slab	SM	\$120.00	7,200	\$864,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	800	\$200,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	7,200	\$2,448,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	7,200	\$1,152,000	
	Station Lighting	SM	\$130.00	7,200	\$936,000	
	Signage	platform	\$5,000.00	2	\$10,000	
	Platform Furnishing	platform	\$45,000.00	2	\$90,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	8	\$160,000	
						\$8,344,000
11	Station Building & Access to Platforms					
	Passenger Terminal (200'x150' Foot Print)	SM	\$540.00	5,500	\$2,970,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$3,290,000
	Sub-Total					\$23,460,000
	Mobilization & Indirect Field Cost		15%			\$3,519,000
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$26,979,000
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

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PREPARED BY: SM

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DATE: 6/16/2003

PROJECT: California High Speed Train EIR/EIS

Intermediate Stations

CONCEPTUAL CONSTRUCTION COST ESTIMATE

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Riverside/UCR Station (Aerial, not near existing tracks - Urban)					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	4.00	\$30,800	
	Site Demolition	HECT	\$800,000.00	4.00	\$3,200,000	
						\$3,230,800
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	-	\$0	
						\$0
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	Aerial Structure	HECT	\$10,750,000.00	5.00	\$53,750,000	
						\$53,750,000
6	Track work					
	Direct Fixation	M	\$800.23	2,560	\$2,048,589	
	Turnouts, No. 26.5 W. Conc. Ties	EA	\$365,000.00	4	\$1,460,000	
	Crossover, No. 26.5 w. Conc. Ties	EA	\$750,000.00	4	\$3,000,000	
	Bumping Posts	EA	\$50,000.00		\$0	
	Heavy Duty Rubber Grade Crossing					
						\$6,508,589
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					
						\$0
8	Traction Power					
	(Included in Overall Estimate)					
						\$0
9	Train Control					
	(Included in Overall Estimate)					
						\$0
10	Station Platform					
	Platforms:					
	Foundation- Pier Caissons	SM	170	7,200	\$1,224,000	
	Pier Caps	SM	\$175.00	7,200	\$1,260,000	
	Platform Slab	SM	\$120.00	7,200	\$864,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	800	\$200,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	7,200	\$2,448,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	7,200	\$1,152,000	
	Station Lighting	SM	\$130.00	7,200	\$936,000	
	Signage	platform	\$5,000.00	2	\$10,000	
	Platform Furnishing	platform	\$45,000.00	2	\$90,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	8	\$160,000	
						\$8,344,000
11	Station Building & Access to Platforms					
	Passenger Terminal (200'x150' Foot Print)	SM	\$540.00	5,500	\$2,970,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$3,290,000
	Sub-Total					\$75,120,000
	Mobilization & Indirect Field Cost		15%			\$11,268,000
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$86,388,000
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

PARSONS BRINCKERHOFF

PREPARED BY: SM

CHECKED BY:

DATE: 6/16/2003

PROJECT: California High Speed Train EIR/EIS**Intermediate Stations****CONCEPTUAL CONSTRUCTION COST ESTIMATE**

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	South El Monte Station (At-grade, near exist tracks - Suburban)					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	4.00	\$30,800	
	Site Demolition	HECT	\$800,000.00	4.00	\$3,200,000	
						\$3,230,800
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	105,000.00	\$787,500	
						\$787,500
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	at grade					
						\$0
6	Track work					
	Ballasted Track Incl. Ballast and subballast	M	\$430.00	7,000	\$3,010,000	
	Turnouts, No. 40.5 W. Conc. Ties	EA	\$400,000.00	4	\$1,600,000	
	Crossover, No. 40.5 w. Conc. Ties	EA	\$800,000.00	4	\$3,200,000	
	Bumping Posts	EA	\$50,000.00		\$0	
	Heavy Duty Rubber Grade Crossing					
						\$7,810,000
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					
						\$0
8	Traction Power					
	(Included in Overall Estimate)					
						\$0
9	Train Control					
	(Included in Overall Estimate)					
						\$0
10	Station Platform					
	Platforms:					
	Foundation- Pier Caissons	SM	170	7,200	\$1,224,000	
	Pier Caps	SM	\$175.00	7,200	\$1,260,000	
	Platform Slab	SM	\$120.00	7,200	\$864,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	800	\$200,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	7,200	\$2,448,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	7,200	\$1,152,000	
	Station Lighting	SM	\$130.00	7,200	\$936,000	
	Signage	platform	\$5,000.00	2	\$10,000	
	Platform Furnishing	platform	\$45,000.00	2	\$90,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	8	\$160,000	
						\$8,344,000
11	Station Building & Access to Platforms					
	Passenger Terminal (200'x150' Foot Print)	SM	\$540.00	5,500	\$2,970,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$3,290,000
	Sub-Total					\$23,460,000
	Mobilization & Indirect Field Cost		15%			\$3,519,000
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$26,979,000
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

PARSONS BRINCKERHOFF

PREPARED BY: SM

CHECKED BY:

DATE: 6/16/2003

PROJECT: California High Speed Train EIR/EIS**Intermediate Stations****CONCEPTUAL CONSTRUCTION COST ESTIMATE**

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	City of Industry Station (At-grade, near exist tracks - Suburban					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	7.00	\$53,900	
	Site Demolition	HECT	\$800,000.00	4.00	\$3,200,000	
						\$3,253,900
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	73,000.00	\$547,500	
						\$547,500
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	at grade					\$0
6	Track work					
	Ballasted Track Incl. Ballast and subballast	M	\$430.00	4,860	\$2,089,800	
	Turnouts, No. 32.7 W. Conc. Ties	EA	\$365,000.00	4	\$1,460,000	
	Crossover, No. 32.7 w. Conc. Ties	EA	\$750,000.00	4	\$3,000,000	
	Bumping Posts	EA	\$50,000.00		\$0	
	Heavy Duty Rubber Grade Crossing					\$6,549,800
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					\$0
8	Traction Power					
	(Included in Overall Estimate)					\$0
9	Train Control					
	(Included in Overall Estimate)					\$0
10	Station Platform					
	Platforms:					
	Foundation- Pier Caissons	SM	170	7,200	\$1,224,000	
	Pier Caps	SM	\$175.00	7,200	\$1,260,000	
	Platform Slab	SM	\$120.00	7,200	\$864,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	800	\$200,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	7,200	\$2,448,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	7,200	\$1,152,000	
	Station Lighting	SM	\$130.00	7,200	\$936,000	
	Signage	platform	\$5,000.00	2	\$10,000	
	Platform Furnishing	platform	\$45,000.00	2	\$90,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	8	\$160,000	
						\$8,344,000
11	Station Building & Access to Platforms					
	Passenger Terminal (300'x200' Foot Print)	SM	\$540.00	11,000	\$5,940,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$6,260,000
	Sub-Total					\$24,960,000
	Mobilization & Indirect Field Cost		15%			\$3,744,000
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$28,704,000
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

PARSONS BRINCKERHOFF

PREPARED BY: SM

CHECKED BY:

DATE: 6/16/2003

PROJECT: California High Speed Train EIR/EIS

Intermediate Stations

CONCEPTUAL CONSTRUCTION COST ESTIMATE

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	San Bernardino Station (Aerial, not near existing tracks - Urban)					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	4.00	\$30,800	
	Site Demolition	HECT	\$800,000.00	4.00	\$3,200,000	
						\$3,230,800
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	-	\$0	
						\$0
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	Aerial Structure	HECT	\$10,750,000.00	5.00	\$53,750,000	
						\$53,750,000
6	Track work					
	Direct Fixation	M	\$800.23	2,560	\$2,048,589	
	Turnouts, No. 26.5 W. Conc. Ties	EA	\$365,000.00	4	\$1,460,000	
	Crossover, No. 26.5 w. Conc. Ties	EA	\$750,000.00	4	\$3,000,000	
	Bumping Posts	EA	\$50,000.00		\$0	
	Heavy Duty Rubber Grade Crossing					
						\$6,508,589
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					
						\$0
8	Traction Power					
	(Included in Overall Estimate)					
						\$0
9	Train Control					
	(Included in Overall Estimate)					
						\$0
10	Station Platform					
	Platforms:					
	Foundation- Pier Caissons	SM	170	7,200	\$1,224,000	
	Pier Caps	SM	\$175.00	7,200	\$1,260,000	
	Platform Slab	SM	\$120.00	7,200	\$864,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	800	\$200,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	7,200	\$2,448,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	7,200	\$1,152,000	
	Station Lighting	SM	\$130.00	7,200	\$936,000	
	Signage	platform	\$5,000.00	2	\$10,000	
	Platform Furnishing	platform	\$45,000.00	2	\$90,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	8	\$160,000	
						\$8,344,000
11	Station Building & Access to Platforms					
	Passenger Terminal (200'x150' Foot Print)	SM	\$540.00	5,500	\$2,970,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$3,290,000
	Sub-Total					\$75,120,000
	Mobilization & Indirect Field Cost		15%			\$11,268,000
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$86,388,000
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

PARSONS BRINCKERHOFF

PREPARED BY: SM

CHECKED BY:

DATE: 6/16/2003

PROJECT: California High Speed Train EIR/EIS

Intermediate Stations

CONCEPTUAL CONSTRUCTION COST ESTIMATE

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	March ARB Station (At-grade, not near existing tracks - Suburban)					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	4.00	\$30,800	
	Site Demolition	HECT	\$800,000.00	4.00	\$3,200,000	
						\$3,230,800
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	105,000.00	\$787,500	
						\$787,500
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	at grade					
						\$0
6	Track work					
	Ballasted Track Incl. Ballast and subballast	M	\$430.00	7,000	\$3,010,000	
	Turnouts, No. 40.5 W. Conc. Ties	EA	\$400,000.00	4	\$1,600,000	
	Crossover, No. 40.5 w. Conc. Ties	EA	\$800,000.00	4	\$3,200,000	
	Bumping Posts	EA	\$50,000.00		\$0	
	Heavy Duty Rubber Grade Crossing					
						\$7,810,000
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					
						\$0
8	Traction Power					
	(Included in Overall Estimate)					
						\$0
9	Train Control					
	(Included in Overall Estimate)					
						\$0
10	Station Platform					
	Platforms:					
	Foundation- Pier Caissons	SM	170	7,200	\$1,224,000	
	Pier Caps	SM	\$175.00	7,200	\$1,260,000	
	Platform Slab	SM	\$120.00	7,200	\$864,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	800	\$200,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	7,200	\$2,448,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	7,200	\$1,152,000	
	Station Lighting	SM	\$130.00	7,200	\$936,000	
	Signage	platform	\$5,000.00	2	\$10,000	
	Platform Furnishing	platform	\$45,000.00	2	\$90,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	8	\$160,000	
						\$8,344,000
11	Station Building & Access to Platforms					
	Passenger Terminal (200'x150' Foot Print)	SM	\$540.00	5,500	\$2,970,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$3,290,000
	Sub-Total					\$23,460,000
	Mobilization & Indirect Field Cost		15%			\$3,519,000
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$26,979,000
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

PARSONS BRINCKERHOFF

PREPARED BY: SM

CHECKED BY:

DATE: 6/16/2003

PROJECT: California High Speed Train EIR/EIS**Intermediate Stations****CONCEPTUAL CONSTRUCTION COST ESTIMATE**

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Temecula/Murrieta Station (Aerial, not near existing tracks - Suburban)					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	4.00	\$30,800	
	Site Demolition	HECT	\$800,000.00	4.00	\$3,200,000	
						\$3,230,800
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	105,000.00	\$787,500	
						\$787,500
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	Aerial Structure	HECT	\$10,750,000.00	11.00	\$118,250,000	
						\$118,250,000
6	Track work					
	Direct Fixation	M	\$800.23	7,000	\$5,601,610	
	Turnouts, No. 40.5 W. Conc. Ties	EA	\$400,000.00	4	\$1,600,000	
	Crossover, No. 40.5 w. Conc. Ties	EA	\$800,000.00	4	\$3,200,000	
	Bumping Posts	EA	\$50,000.00		\$0	
	Heavy Duty Rubber Grade Crossing					
						\$10,401,610
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					
						\$0
8	Traction Power					
	(Included in Overall Estimate)					
						\$0
9	Train Control					
	(Included in Overall Estimate)					
						\$0
10	Station Platform					
	Platforms:					
	Foundation- Pier Caissons	SM	170	7,200	\$1,224,000	
	Pier Caps	SM	\$175.00	7,200	\$1,260,000	
	Platform Slab	SM	\$120.00	7,200	\$864,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	800	\$200,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	7,200	\$2,448,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	7,200	\$1,152,000	
	Station Lighting	SM	\$130.00	7,200	\$936,000	
	Signage	platform	\$5,000.00	2	\$10,000	
	Platform Furnishing	platform	\$45,000.00	2	\$90,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	8	\$160,000	
						\$8,344,000
11	Station Building & Access to Platforms					
	Passenger Terminal (185'x105' Foot Print)	SM	\$540.00	3,500	\$1,890,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$2,210,000
	Sub-Total					\$143,220,000
	Mobilization & Indirect Field Cost		15%			\$21,483,000
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$164,703,000
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

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CHECKED BY:

DATE: 6/16/2003

PROJECT: California High Speed Train EIR/EIS**Intermediate Stations****CONCEPTUAL CONSTRUCTION COST ESTIMATE**

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Escondido (I-15) Station (Aerial, not near existing tracks - Suburban)					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	4.00	\$30,800	
	Site Demolition	HECT	\$800,000.00	4.00	\$3,200,000	
						\$3,230,800
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	-	\$0	
						\$0
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	Aerial Structure	HECT	\$10,750,000.00	11.00	\$118,250,000	
						\$118,250,000
6	Track work					
	Direct Fixation	M	\$800.23	7,000	\$5,601,610	
	Turnouts, No. 40.5 W. Conc. Ties	EA	\$400,000.00	4	\$1,600,000	
	Crossover, No. 40.5 w. Conc. Ties	EA	\$800,000.00	4	\$3,200,000	
	Bumping Posts	EA	\$50,000.00		\$0	
	Heavy Duty Rubber Grade Crossing					
						\$10,401,610
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					
						\$0
8	Traction Power					
	(Included in Overall Estimate)					
						\$0
9	Train Control					
	(Included in Overall Estimate)					
						\$0
10	Station Platform					
	Platforms:					
	Foundation- Pier Caissons	SM	170	7,200	\$1,224,000	
	Pier Caps	SM	\$175.00	7,200	\$1,260,000	
	Platform Slab	SM	\$120.00	7,200	\$864,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	800	\$200,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	7,200	\$2,448,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	7,200	\$1,152,000	
	Station Lighting	SM	\$130.00	7,200	\$936,000	
	Signage	platform	\$5,000.00	2	\$10,000	
	Platform Furnishing	platform	\$45,000.00	2	\$90,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	8	\$160,000	
						\$8,344,000
11	Station Building & Access to Platforms					
	Passenger Terminal (185'x105' Foot Print)	SM	\$540.00	3,500	\$1,890,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$2,210,000
	Sub-Total					\$142,440,000
	Mobilization & Indirect Field Cost		15%			\$21,366,000
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$163,806,000
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

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DATE: 6/16/2003

PROJECT: California High Speed Train EIR/EIS**Intermediate Stations****CONCEPTUAL CONSTRUCTION COST ESTIMATE**

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Escondido Transit Center (Tunnel, not near existing tracks - Suburban)					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	2.00	\$15,400	
	Site Demolition	HECT	\$800,000.00	2.00	\$1,600,000	
						\$1,615,400
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3				\$0
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	Cut & Cover Structure - Incl. Earthwork, Support System & Structure	HECT	\$26,206,000.00	11.00	\$288,266,000	
						\$288,266,000
6	Track work					
	Direct Fixation	M	\$800.23	10,000	\$8,002,300	
	Turnouts, No. 50 W. Conc. Ties	EA	\$700,000.00	4	\$2,800,000	
	Crossover, No. 50 w. Conc. Ties	EA	\$1,500,000.00	4	\$6,000,000	
	Bumping Posts	EA	\$50,000.00		\$0	
	Heavy Duty Rubber Grade Crossing					\$16,802,300
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					\$0
8	Traction Power					
	(Included in Overall Estimate)					\$0
9	Train Control					
	(Included in Overall Estimate)					\$0
10	Station Platform					
	Platforms:					
	Foundation- Pier Caissons	SM	170	7,200	\$1,224,000	
	Pier Caps	SM	\$175.00	7,200	\$1,260,000	
	Platform Slab	SM	\$120.00	7,200	\$864,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	800	\$200,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	7,200	\$2,448,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	7,200	\$1,152,000	
	Station Lighting	SM	\$130.00	7,200	\$936,000	
	Signage	platform	\$5,000.00	2	\$10,000	
	Platform Furnishing	platform	\$45,000.00	2	\$90,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	8	\$160,000	
						\$8,344,000
11	Station Building & Access to Platforms					
	Passenger Terminal (200'x150' Foot Print)	SM	\$540.00	5,500	\$2,970,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$3,290,000
	Sub-Total					\$318,320,000
	Mobilization & Indirect Field Cost		15%			\$47,748,000
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$366,068,000
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

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DATE: 6/16/2003

PROJECT: California High Speed Train EIR/EIS**Intermediate Stations****CONCEPTUAL CONSTRUCTION COST ESTIMATE**

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Mira Mesa Station (Aerial, not near existing tracks - Suburban)					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	4.00	\$30,800	
	Site Demolition	HECT	\$800,000.00	4.00	\$3,200,000	
						\$3,230,800
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	-	\$0	
						\$0
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	Aerial Structure	HECT	\$10,750,000.00	11.00	\$118,250,000	
						\$118,250,000
6	Track work					
	Direct Fixation	M	\$800.23	7,000	\$5,601,610	
	Turnouts, No. 40.5 W. Conc. Ties	EA	\$400,000.00	4	\$1,600,000	
	Crossover, No. 40.5 w. Conc. Ties	EA	\$800,000.00	4	\$3,200,000	
	Bumping Posts	EA	\$50,000.00		\$0	
	Heavy Duty Rubber Grade Crossing					
						\$10,401,610
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					
						\$0
8	Traction Power					
	(Included in Overall Estimate)					
						\$0
9	Train Control					
	(Included in Overall Estimate)					
						\$0
10	Station Platform					
	Platforms:					
	Foundation- Pier Caissons	SM	170	7,200	\$1,224,000	
	Pier Caps	SM	\$175.00	7,200	\$1,260,000	
	Platform Slab	SM	\$120.00	7,200	\$864,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	800	\$200,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	7,200	\$2,448,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	7,200	\$1,152,000	
	Station Lighting	SM	\$130.00	7,200	\$936,000	
	Signage	platform	\$5,000.00	2	\$10,000	
	Platform Furnishing	platform	\$45,000.00	2	\$90,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	8	\$160,000	
						\$8,344,000
11	Station Building & Access to Platforms					
	Passenger Terminal (185'x105' Foot Print)	SM	\$540.00	3,500	\$1,890,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$2,210,000
	Sub-Total					\$142,440,000
	Mobilization & Indirect Field Cost		15%			\$21,366,000
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$163,806,000
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

PARSONS BRINCKERHOFF

PREPARED BY: SM

CHECKED BY:

DATE: 6/16/2003

PROJECT: California High Speed Train EIR/EIS

Intermediate Stations

CONCEPTUAL CONSTRUCTION COST ESTIMATE

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	University City Station (At-grade - Suburban)					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	4.00	\$30,800	
	Site Demolition	HECT	\$800,000.00	4.00	\$3,200,000	
						\$3,230,800
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	150,000.00	\$1,125,000	
						\$1,125,000
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	at-grade	HECT				
						\$0
6	Track work					
	Ballasted Track Incl. Ballast and subballast	M	\$430.00	10,000	\$4,300,000	
	Turnouts, No. 50 W. Conc. Ties	EA	\$700,000.00	4	\$2,800,000	
	Crossover, No. 50 w. Conc. Ties	EA	\$1,500,000.00	4	\$6,000,000	
	Bumping Posts	EA	\$50,000.00		\$0	
	Heavy Duty Rubber Grade Crossing					
						\$13,100,000
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					
						\$0
8	Traction Power					
	(Included in Overall Estimate)					
						\$0
9	Train Control					
	(Included in Overall Estimate)					
						\$0
10	Station Platform					
	Platforms:					
	Foundation- Pier Caissons	SM	170	7,200	\$1,224,000	
	Pier Caps	SM	\$175.00	7,200	\$1,260,000	
	Platform Slab	SM	\$120.00	7,200	\$864,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	800	\$200,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	7,200	\$2,448,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	7,200	\$1,152,000	
	Station Lighting	SM	\$130.00	7,200	\$936,000	
	Signage	platform	\$5,000.00	2	\$10,000	
	Platform Furnishing	platform	\$45,000.00	2	\$90,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	8	\$160,000	
						\$8,344,000
11	Station Building & Access to Platforms					
	Passenger Terminal (200'x150' Foot Print)	SM	\$540.00	5,500	\$2,970,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$3,290,000
	Sub-Total					\$29,090,000
	Mobilization & Indirect Field Cost		15%			\$4,363,500
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$33,453,500
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

PARSONS BRINCKERHOFF

PREPARED BY: SM

CHECKED BY:

DATE: 6/16/2003

PROJECT: California High Speed Train EIR/EIS**Intermediate Stations****CONCEPTUAL CONSTRUCTION COST ESTIMATE**

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Norwalk LAUS-UP Santa Ana Station (Suburban)					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	7.00	\$53,900	
	Site Demolition	HECT	\$800,000.00	4.00	\$3,200,000	
						\$3,253,900
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	73,000.00	\$547,500	
						\$547,500
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	at grade					\$0
6	Track work					
	Ballasted Track Incl. Ballast and subballast	M	\$430.00	4,860	\$2,089,800	
	Turnouts, No. 32.7 W. Conc. Ties	EA	\$365,000.00	4	\$1,460,000	
	Crossover, No. 32.7 w. Conc. Ties	EA	\$750,000.00	4	\$3,000,000	
	Bumping Posts	EA	\$50,000.00		\$0	
	Heavy Duty Rubber Grade Crossing					\$6,549,800
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					\$0
8	Traction Power					
	(Included in Overall Estimate)					\$0
9	Train Control					
	(Included in Overall Estimate)					\$0
10	Station Platform					
	Platforms:					
	Foundation- Pier Caissons	SM	170	7,200	\$1,224,000	
	Pier Caps	SM	\$175.00	7,200	\$1,260,000	
	Platform Slab	SM	\$120.00	7,200	\$864,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	800	\$200,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	7,200	\$2,448,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	7,200	\$1,152,000	
	Station Lighting	SM	\$130.00	7,200	\$936,000	
	Signage	platform	\$5,000.00	2	\$10,000	
	Platform Furnishing	platform	\$45,000.00	2	\$90,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	8	\$160,000	
						\$8,344,000
11	Station Building & Access to Platforms					
	Passenger Terminal (300'x200' Foot Print)	SM	\$540.00	11,000	\$5,940,000	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$6,260,000
	Sub-Total					\$24,960,000
	Mobilization & Indirect Field Cost		15%			\$3,744,000
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$28,704,000
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					

PARSONS BRINCKERHOFF

PREPARED BY: SM

CHECKED BY:

DATE: 6/16/2003

PROJECT: California High Speed Train EIR/EIS

Intermediate Stations

CONCEPTUAL CONSTRUCTION COST ESTIMATE

Item No.	DESCRIPTION	UNIT	UNIT COST (2003\$)	QUANTITY	Estimated Cost	Category Total Cost
	Shared Use Station					
1	Site Clearing					
	Site Clearing	HECT	\$7,700.00	-	\$0	
	Site Demolition	HECT	\$800,000.00	-	\$0	
						\$0
2	Earthwork					
	Grading Site- Cut & Fill 1M Average	M3	\$7.50	-	\$0	
						\$0
3	Paving & Surfacing- excluded					
						\$0
4	Piped Utilities- excluded					
						\$0
5	Site Structural Work					
	at grade					\$0
6	Track work					
	Ballasted Track Incl. Ballast and subballast	M	\$430.00	2,430	\$1,044,900	
	Turnouts, No. 32.7 W. Conc. Ties	EA	\$365,000.00	-	\$0	
	Crossover, No. 32.7 w. Conc. Ties	EA	\$750,000.00	4	\$3,000,000	
	Bumping Posts	EA	\$50,000.00		\$0	
	Heavy Duty Rubber Grade Crossing					\$4,044,900
7	Station Electrical Work					
	CCTV & Security System- excluded					
	Communication System-excluded					
	Lighting- See Item 10					\$0
8	Traction Power					
	(Included in Overall Estimate)					\$0
9	Train Control					
	(Included in Overall Estimate)					\$0
10	Station Platform					
	Platforms:					
	Foundation- Pier Caissons	SM	170	3,600	\$612,000	
	Pier Caps	SM	\$175.00	3,600	\$630,000	
	Platform Slab	SM	\$120.00	3,600	\$432,000	
	Platform Warning Edge & Rubbing Edge	M	\$250.00	400	\$100,000	
	Platform Finish Work- excluded					
	Canopy- Str. Steel	SM	\$340.00	3,600	\$1,224,000	
	Canopy Roof Metal Deck, Roofing, Gutter, Etc.	SM	\$160.00	3,600	\$576,000	
	Station Lighting	SM	\$130.00	3,600	\$468,000	
	Signage	platform	\$5,000.00	1	\$5,000	
	Platform Furnishing	platform	\$45,000.00	1	\$45,000	
	Windscreen Shelter- 4 ea. Per Platform	EA	\$20,000.00	4	\$80,000	
						\$4,172,000
11	Station Building & Access to Platforms					
	Passenger Terminal (300'x200' Foot Print)	SM	\$540.00	-	\$0	
	Ticketing (Enclosed)	SM	\$3,200.00	100	\$320,000	
						\$320,000
	Sub-Total					\$8,540,000
	Mobilization & Indirect Field Cost		15%			\$1,281,000
	Subtotal- Construction Cost- Base (year 2003 dollars)					\$9,821,000
	Contingencies					
	Escalation to Midpoint of Construction- not included					
	Right of way Acquisition					
	Subtotal- Construction Cost (Not Escalated)					
	Project Conceptual & Preliminary Engineering					
	Final Engineering Design Cost					
	Construction Management & Inspection Costs @ 10%					
	Field Changed Condition					
	Owner Administration & Engineering					
	Total Estimated Project Cost					